

June 29, 2011

Dear Offerors,

SUBJECT: RFQ Number **S-PK330-11-Q-5573** for Renovation of Residence located in Lahore.

The Embassy of the United States of America invites you to submit a quotation for Renovation of **House # 45, C-1, Gulberg III, Lahore**.

If you are interested in submitting a quotation on this project, read the instructions in Section J & L of the attached Request for Quotation (RFQ).

If you intend to submit a quotation, you should thoroughly examine all documents contained in the contract solicitation package. The Embassy intends to conduct a site visit (see J. C, 52.236-27). **The site visit will be held at House # 45, C-1, Gulberg III, Lahore on July 11, 2011 at 1400 hrs.** Maximum two persons from one firm can participate in site visit. Interested offerors must provide with full name of participant/s (as written on NIC), NIC number and particulars of vehicle to be used like make, model, color and registration number **before 2.00 p.m. on July 7, 2011**. This information can be provided on e-mail address: **Khurshida2@state.gov or ZainuddinA@state.gov**. See section J (b) and (c).

Your quotation must be submitted in a sealed envelope marked "**Quotation Enclosed (SPK-330-11-Q-5573)**" to **GSO Procurement, American Embassy, Ramna-5, Islamabad on or before 1500 hrs on July 22, 2011**. No quotation will be accepted after this time.

Complete Part II of the Standard Form 1442, (item # 14 to 17 and 30a, b & c), and have the form signed by an authorized representative of your company, or the quotation may be considered unacceptable and may be rejected.

In order for a quotation to be considered, you must also complete and submit the following:

1. Section B and Attachment 2: Quotation Breakdown by Divisions of Specification.
2. Section K, Representations and Certifications;
3. Bar Chart illustrating sequence of work to be performed;
4. Additional information as required in Section L.

Please direct any questions regarding this solicitation to **Barbara C. Irwin** by letter or by telephone **92-51-208-2000** during regular business hours.

Sincerely,

Barbara C. Irwin
Contracting Officer

SOLICITATION, OFFER, AND AWARD (Construction, Alteration, or Repair)	1. SOLICITATION NO. S-PK-330-11-Q-5573	2. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFQ)	3. DATE ISSUED June 29, 2011	PAGE OF PAGES 1 of 73

IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.

4. CONTRACT NO.		5. REQUISITION/PURCHASE REQUEST NO. PR1236668	6. PROJECT NO. Renovation of Residence in Lahore.
7. ISSUED BY Contracting Officer, GSO-Procurement & Contracting Office American Embassy, Islamabad Diplomatic Enclave, Ramna-5 Islamabad, Pakistan	CODE	8. ADDRESS OFFER TO Contracting Officer, GSO-Procurement & Contracting Office American Embassy, Islamabad Diplomatic Enclave, Ramna-5 Islamabad, Pakistan	
9. FOR INFORMATION CALL: ➔	A. NAME Barbara C. Irwin	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) (92) 051-208-2210	

SOLICITATION

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder."

10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS (Title, identifying no., date):
TABLE OF CONTENTS

- A. Price
- B. Scope of Work
- C. Packaging and Marking
- D. Inspection and Acceptance
- E. Deliveries/Performance
- F. Administrative Data
- G. Special Requirements
- H. Clauses
- I. List of Attachments
- J. Quotation Information
- K. Evaluation Criteria
- L. Representations, Certifications, and other Statements of Offerors or Quoters

Attachments

- Attachment 1: Sample Bank Letter of Guarantee (1 page)
- Attachment 2: Breakdown of Price by Divisions of Specifications (1 page)
- Attachment 3: Scope of Work (SOW) (42 pages)
- Attachment 4: Cut Sheet (Will be provided on site visit)

11. The Contractor shall begin performance within **10** calendar days and complete it within **90 work** days after receiving
☐ award, ☒ notice to proceed. This performance period is ☒ mandatory, ☐ negotiable. (See _____.)

12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (If "YES," indicate within how many calendar days after award in Item 12B.) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	12B. CALENDAR DAYS 10 days after Award
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13. ADDITIONAL SOLICITATION REQUIREMENTS:

- A. Sealed offers in original and **2** copies to perform the work required are due at the place specified in Item 8 by **1500** (hour) local time **July 22, 2011**. If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.
- B. An offer guarantee ☐ is, ☒ is not required.
- C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.
- D. Offers providing less than **60** calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

OFFER *(Must be fully completed by offeror)*

14. NAME AND ADDRESS OF OFFEROR <i>(Include ZIP Code)</i>		15. TELEPHONE NO. <i>(Include area code)</i>
		16. REMITTANCE ADDRESS <i>(Include only if different than Item 14)</i>
CODE	FACILITY CODE	

17. The offeror agrees to perform the work at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government within _____ calendar days after the date offers are due. *(Insert any number equal to or greater than the minimum requirement stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)*

AMOUNTS



18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGMENT OF AMENDMENTS*The offeror acknowledges receipt of amendments to the solicitation -- give number and date of each*

AMENDMENT NO.										
DATE										
20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER <i>(Type or print)</i>					20B. SIGNATURE				20C. OFFER DATE	

AWARD *(To be completed by Government)*

21. ITEMS ACCEPTED:

22. AMOUNT		23. ACCOUNTING AND APPROPRIATION DATA	
24. SUBMIT INVOICES TO ADDRESS SHOWN IN <i>(4 copies unless otherwise specified)</i>	ITEM 	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO <input type="checkbox"/> 10 U.S.C. 2304(c)() <input type="checkbox"/> 41 U.S.C. 253(c)()	
26. ADMINISTERED BY Contracting Officer, U.S Embassy, Diplomatic Enclave, Ramna-5 Islamabad	CODE GSO	27. PAYMENT WILL BE MADE BY Financial Management Officer (FMO) U.S Embassy, Diplomatic Enclave, Ramna-5 Islamabad	

CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE

<input type="checkbox"/> 28. NEGOTIATED AGREEMENT <i>(Contractor is required to sign this document and return _____ copies to issuing office.)</i> Contractor agrees to furnish and deliver all items or perform all work, requisitions identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications or incorporated by reference in or attached to this contract.		<input type="checkbox"/> 29. AWARD <i>(Contractor is not required to sign this document.)</i> Your offer on this solicitation is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.	
30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN <i>(Type or print)</i>		31A. NAME OF CONTRACTING OFFICER <i>(Type or print)</i>	
30B. SIGNATURE	30C. DATE	31B. UNITED STATES OF AMERICA BY	31C. AWARD DATE

Computer Generated
BACK (REV. 4-85)**STANDARD FORM 1442**

REQUEST FOR QUOTATIONS - CONSTRUCTION

A. PRICE

The contractor shall complete all work, including furnishing all labor, material, equipment and services required under this purchase order for the following firm fixed price and within the time specified. This price shall include all labor, materials, overhead and profit.

_____ Total Price Pak Rs.

B. SCOPE OF WORK

The character and scope of the work are set forth in the contract. The Contractor shall furnish and install all materials required by this contract.

In case of differences between small and large-scale drawings, the latter will govern. Where a portion of the work is drawn in detail and the remainder of the work is indicated in outline, the parts drawn in detail shall apply also to all other portions of the work.

C. PACKAGING AND MARKING

Mark materials delivered to the site as follows (If contractors need to import material for this project):

SHIPPING ADDRESS:

The US EMBASSY ISLAMABAD, PAKISTAN

Diplomatic Enclave, Ramna 5,

Islamabad, Pakistan - 44000.

Ref: SPK330-11-C- _____ (number to be allotted after award)

Attn: GSO SHIPPING

Ph: 0092-51-208-2266, Fax: 0092-51-262-3541

D. INSPECTION AND ACCEPTANCE

The COR, or his/her authorized representatives, will inspect from time to time the services being performed and the supplies furnished to determine whether work is being performed in a satisfactory manner, and that all supplies are of acceptable quality and standards.

The Contractor shall be responsible for any countermeasures or corrective action, within the scope of this contract, which may be required by the Contracting Officer as a result of such inspection.

D.1 *Substantial Completion*

(a) "*Substantial Completion*" means the stage in the progress of the work as determined and certified by the Contracting Officer in writing to the Contractor, on which the work (or a portion designated by the Government) is sufficiently complete and satisfactory. Substantial Solicitation # S-PK330-11-Q-5573

completion means that the property may be occupied or used for the purpose for which it is intended, and only minor items such as touch-up, adjustments, and minor replacements or installations remain to be completed or corrected which:

- (1) do not interfere with the intended occupancy or utilization of the work, and
- (2) can be completed or corrected within the time period required for final completion.

(b) The "date of substantial completion" means the date determined by the Contracting Officer or authorized Government representative as of which substantial completion of the work has been achieved.

Use and Possession upon Substantial Completion - The Government shall have the right to take possession of and use the work upon substantial completion. Upon notice by the Contractor that the work is substantially complete (a Request for Substantial Completion) and an inspection by the Contracting Officer or an authorized Government representative (including any required tests), the Contracting Officer shall furnish the Contractor a Certificate of Substantial Completion. The certificate will be accompanied by a Schedule of Defects listing items of work remaining to be performed, completed or corrected before final completion and acceptance. Failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use upon substantial completion shall not be deemed an acceptance of any work under the contract.

D.2 *Final Completion and Acceptance*

D.2.1 "*Final completion and acceptance*" means the stage in the progress of the work as determined by the Contracting Officer and confirmed in writing to the Contractor, at which all work required under the contract has been completed in a satisfactory manner, subject to the discovery of defects after final completion, and except for items specifically excluded in the notice of final acceptance.

D.2.2 The "*date of final completion and acceptance*" means the date determined by the Contracting Officer when final completion of the work has been achieved, as indicated by written notice to the Contractor.

D.2.3 *Final Inspection and Tests* - The Contractor shall give the Contracting Officer at least five (5) days advance written notice of the date when the work will be fully completed and ready for final inspection and tests. Final inspection and tests will be started not later than the date specified in the notice unless the Contracting Officer determines that the work is not ready for final inspection and so informs the Contractor.

D.2.4 *Final Acceptance* - If the Contracting Officer is satisfied that the work under the contract is complete (with the exception of continuing obligations), the Contracting Officer shall issue to the Contractor a notice of final acceptance and make final payment upon:

- Satisfactory completion of all required tests,

- a final inspection that all items by the Contracting Officer listed in the Schedule of Defects have been completed or corrected and that the work is finally complete (subject to the discovery of defects after final completion), and
- submittal by the Contractor of all documents and other items required upon completion of the work, including a final request for payment (Request for Final Acceptance)

E - DELIVERIES OR PERFORMANCE

52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

The Contractor shall be required to:

- (a) commence work under this contract within **10** calendar days after the date the Contractor receives the notice to proceed,
- (b) prosecute the work diligently, and,
- (c) complete the entire work ready for use not later than **90 work days after notice to proceed.**

The time stated for completion shall include final cleanup of the premises and completion of punch list items.

52.211-12 LIQUIDATED DAMAGES - CONSTRUCTION (SEP 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, or any extension, the Contractor shall pay liquidated damages to the Government in the amount of **Pak Rs.10,000.00** for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Default clause.

CONTRACTOR'S SUBMISSION OF CONSTRUCTION SCHEDULES

(a) The time for submission of the schedules referenced in FAR 52.236-15, "Schedules for Construction Contracts", paragraph (a), is hereby modified to reflect the due date for submission as "10" calendar days after receipt of an executed contract".

(b) These schedules shall include the time by which shop drawings, product data, samples and other submittals required by the contract will be submitted for approval.

(c) The Contractor shall revise such schedules (1) to account for the actual progress of the work, (2) to reflect approved adjustments in the performance schedule, and (3) as required

by the Contracting Officer to achieve coordination with work by the Government and any separate contractors used by the Government. The Contractor shall submit a schedule, which sequences work so as to minimize disruption at the job site.

(d) All deliverables shall be in the English language and any system of dimensions (English or metric) shown shall be consistent with that used in the contract. No extension of time shall be allowed due to delay by the Government in approving such deliverables if the Contractor has failed to act promptly and responsively in submitting its deliverables. The contractor shall identify each deliverable as required by the contract.

(e) Acceptance of Schedule: When the Government has accepted any time schedule; it shall be binding upon the Contractor. The completion date is fixed and may be extended only by a written contract modification signed by the Contracting Officer. Acceptance or approval of any schedule or revision thereof by the Government shall not:

- (1) Extend the completion date or obligate the Government to do so,
- (2) Constitute acceptance or approval of any delay, or
- (3) Excuse the Contractor from or relieve the Contractor of its obligation to maintain the progress of the work and achieve final completion by the established completion date.

Notice Of Delay - If the Contractor receives a notice of any change in the work, or if any other conditions arise which are likely to cause or are actually causing delays which the Contractor believes may result in late completion of the project, the Contractor shall notify the Contracting Officer. The Contractor's notice shall state the effect, if any, of such change or other conditions upon the approved schedule, and shall state in what respects, if any, the relevant schedule or the completion date should be revised. The Contractor shall give such notice promptly, not more than ten (10) days after the first event giving rise to the delay or prospective delay. Only the Contracting Officer may make revisions to the approved time schedule.

Notice to Proceed

(a) After receiving and accepting any bonds or evidence of insurance, the Contracting Officer will provide the Contractor a Notice to Proceed. The Contractor must then prosecute the work, commencing and completing performance not later than the time period established in the contract.

(b) It is possible that the Contracting Officer may elect to issue the Notice to Proceed before receipt and acceptance of any bonds or evidence of insurance. Issuance of a Notice to Proceed by the Government before receipt of the required bonds or insurance certificates or policies shall not be a waiver of the requirement to furnish these documents.

Working Hours - All work shall be performed during **0800 -1800 hrs from Monday through Saturday**. Other hours, if requested by the Contractor, may be approved by the Contracting Officer's Representative (COR). The Contractor shall give 24 hours in advance to COR who will

consider any deviation from the hours identified above. Changes in work hours, initiated by the Contractor, will not be a cause for a price increase.

Preconstruction Conference

A preconstruction conference will be held **5** days after contract award at **U.S. Embassy, Diplomatic Enclave, Ramna-5, Islamabad** to discuss the schedule, submittals, notice to proceed, mobilization and other important issues that effect construction progress. See FAR 52.236-26, Preconstruction Conference.

Deliverables - The following items shall be delivered under this contract:

<u>Description</u>	<u>Quantity</u>	<u>Delivery Date</u>	<u>Deliver to</u>
Section G. Securities/Insurance	1	10 days after award	CO
Section E. Construction Schedule	1	10 days after award	COR
Section E. Preconstruction Conference	1	5 days after award	COR
Section G. Personnel Biographies	1	7 days after award	COR
Section F. Payment Request	1	last calendar day of each month	COR
Section D. Request for Substantial Completion	1	5 days before inspection	COR
Section D Request for Final Acceptance	1	3 days before inspection	COR

F ADMINISTRATIVE DATA

652.242-70 CONTRACTING OFFICER'S REPRESENTATIVE (COR) (AUG 1999)

(a) The Contracting Officer may designate in writing one or more Government employees, by name or position title, to take action for the Contracting Officer under this contract. Each designee shall be identified as a Contracting Officer's Representative (COR). Such designation(s) shall specify the scope and limitations of the authority so delegated; provided, that the designee shall not change the terms or conditions of the contract, unless the COR is a warranted Contracting Officer and this authority is delegated in the designation.

(b) The COR for this contract is **Facilities Manager, US Consulate, Lahore.**

Payment: The Contractor's attention is directed to Section H, 52.232-5, "Payments Under Fixed-Price Construction Contracts". The following elaborates on the information contained in that clause.

Requests for payment, may be made no more frequently than monthly. Payment requests shall cover the value of labor and materials completed and in place, including a prorated portion of overhead and profit.

After receipt of the Contractor's request for payment, and on the basis of an inspection of the work, the Contracting Officer shall make a determination as to the amount, which is then due. If the Contracting Officer does not approve payment of the full amount applied for, less the retainage allowed by in 52.232-5, the Contracting Officer shall advise the Contractor as to the reasons.

Under the authority of 52.232-27(a), the 14 day period identified in FAR 52.232-27(a)(1)(i)(A) is hereby changed to 30 days.

Financial Management Officer (FMO)
Diplomatic Enclave, Ramna-5
Islamabad

G. SPECIAL REQUIREMENTS

G.1.0 Performance/Payment Protection - The Contractor shall furnish some form of payment protection as described in 52.228-13 in the amount of 20% of the contract price. These bonds should be in the form of irrevocable letter of credit, bank guarantee or insurance guarantee from a recognized financial institution.

G.1.1 The Contractor shall provide the information required by the paragraph above within ten (10) calendar days after award. Failure to timely submit the required security may result in rescinding or termination of the contract by the Government. If the contract is terminated, the contractor will be liable for those costs as described in FAR 52.249-10, Default (Fixed-Price Construction), which is included in this purchase order.

G.1.2 The bonds or alternate performance security shall guarantee the Contractor's execution and completion of the work within the contract time. This security shall also guarantee the correction of any defects after completion, the payment of all wages and other amounts payable by the Contractor under its subcontracts or for labor and materials, and the satisfaction or removal of any liens or encumbrances placed on the work.

G.1.3 The required securities shall remain in effect in the full amount required until final acceptance of the project by the Government. Upon final acceptance, the penal sum of the performance security shall be reduced to 10% of the contract price. The security shall remain in effect for one year after the date of final completion and acceptance, and the Contractor shall pay any premium required for the entire period of coverage.

G.2.0 Insurance - The Contractor is required by FAR 52.228-5, "Insurance - Work on a Government Installation" to provide whatever insurance is legally necessary. The Contractor shall at its own expense provide and maintain during the entire performance period the following insurance amounts:

G.2.1 General Liability (includes premises/operations, collapse hazard, products, completed operations, contractual, independent contractors, broad form property damage, personal injury)

1. Bodily Injury on or off the site stated in Pak Rupees:

Per Occurrence	Pak Rs. 50,000.00
Cumulative	Pak Rs. 250,000.00

2. Property Damage on or off the site in Pak Rupees:

Per Occurrence	Pak Rs. 50,000.00
Cumulative	Pak Rs. 250,000.00

G.2.2 The foregoing types and amounts of insurance are the minimums required. The Contractor shall obtain any other types of insurance required by local law or that are ordinarily or

customarily obtained in the location of the work. The limit of such insurance shall be as provided by law or sufficient to meet normal and customary claims.

G.2.3 The Contractor agrees that the Government shall not be responsible for personal injuries or for damages to any property of the Contractor, its officers, agents, servants, and employees, or any other person, arising from and incident to the Contractor's performance of this contract. The Contractor shall hold harmless and indemnify the Government from any and all claims arising there from, except in the instance of gross negligence on the part of the Government.

G.2.4 The Contractor shall obtain adequate insurance for damage to, or theft of, materials and equipment in insurance coverage for loose transit to the site or in storage on or off the site.

G.2.5 The general liability policy required of the Contractor shall name "the United States of America, acting by and through the Department of State", as an additional insured with respect to operations performed under this contract.

G.3.0 Document Descriptions

G.3.1 Supplemental Documents: The Contracting Officer shall furnish from time to time such detailed drawings and other information as is considered necessary, in the opinion of the Contracting Officer, to interpret, clarify, supplement, or correct inconsistencies, errors or omissions in the Contract documents, or to describe minor changes in the work not involving an increase in the contract price or extension of the contract time. The Contractor shall comply with the requirements of the supplemental documents, and unless prompt objection is made by the Contractor within 20 days, their issuance shall not provide for any claim for an increase in the Contract price or an extension of contract time.

G.3.1.1 Record Documents. The Contractor shall maintain at the project site:

- (1) a current marked set of Contract drawings and specifications indicating all interpretations and clarification, contract modifications, change orders, or any other departure from the contract requirements approved by the Contracting Officer; and,
- (2) a complete set of record shop drawings, product data, samples and other submittals as approved by the Contracting Officer.

G.3.1.2 "As-Built" Documents: After final completion of the work, but before final acceptance thereof, the Contractor shall provide:

- (1) a complete set of "as-built" drawings, based upon the record set of drawings, marked to show the details of construction as actually accomplished; and,
- (2) record shop drawings and other submittals, in the number and form as required by the specifications.

G.4.0 Laws and Regulations - The Contractor shall, without additional expense to the Government, be responsible for complying with all laws, codes, ordinances, and regulations applicable to the performance of the work, including those of the host country, and with the

lawful orders of any governmental authority having jurisdiction. Host country authorities may not enter the construction site without the permission of the Contracting Officer. Unless otherwise directed by the Contracting Officer, the Contractor shall comply with the more stringent of the requirements of such laws, regulations and orders and of the contract. In the event of a conflict between the contract and such laws, regulations and orders, the Contractor shall promptly advise the Contracting Officer of the conflict and of the Contractor's proposed course of action for resolution by the Contracting Officer.

G.4.1 The Contractor shall comply with all local labor laws, regulations, customs and practices pertaining to labor, safety, and similar matters, to the extent that such compliance is not inconsistent with the requirements of this contract.

G.4.2 The Contractor shall give written assurance to the Contracting Officer that all subcontractors and others performing work on or for the project have obtained all requisite licenses and permits.

G.4.3 The Contractor shall submit proper documentation and evidence satisfactory to the Contracting Officer of compliance with this clause.

G.5.0 Construction Personnel - The Contractor shall maintain discipline at the site and at all times take all reasonable precautions to prevent any unlawful, riotous, or disorderly conduct by or among those employed at the site. The contractor shall ensure the preservation of peace and protection of persons and property in the neighborhood of the project against such action. The Contracting Officer may require, in writing, that the Contractor remove from the work any employee that the Contracting Officer deems incompetent, careless, insubordinate or otherwise objectionable, or whose continued employment on the project is deemed by the Contracting Officer to be contrary to the Government's interests.

G.5.1 If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

G.5.2 After award, the Contractor has ten calendar days to submit to the Contracting Officer a list of workers and supervisors assigned to this project for the Government to conduct all necessary security checks. It is anticipated that security checks will take 3 to 5 days to perform. For each individual the list shall include:

- Full Name
- Place and Date of Birth
- Current Address
- Copy of National Identity Card

Failure to provide any of the above information may be considered grounds for rejection and/or resubmittal of the application. Once the Government has completed the security screening and approved the applicants a badge will be provided to the individual for access to the site. This badge may be revoked at any time due to the falsification of data, or misconduct on

site.

G.5.3 The Contractor shall provide an English speaking supervisor on site at all times. This position is considered as key personnel under this purchase order.

G.6.0 Materials and Equipment - All materials and equipment incorporated into the work shall be new and for the purpose intended, unless otherwise specified. All workmanship shall be of good quality and performed in a skillful manner that will withstand inspection by the Contracting Officer.

G.7.0 Special Warranties

G.7.1 Any special warranties that may be required under the contract shall be subject to the stipulations set forth in 52.246-21, "Warranty of Construction", as long as they are not in conflict.

G.7.2 The Contractor shall obtain and furnish to the Government all information required to make any subcontractor's, manufacturer's, or supplier's guarantee or warranty legally binding and effective. The contractor shall submit both the information and the guarantee or warranty to the Government in sufficient time to permit the Government to meet any time limit specified in the guarantee or warranty, but not later than completion and acceptance of all work under this contract.

G.8.0 Equitable Adjustments

Any circumstance for which the contract provides an equitable adjustment that causes a change within the meaning of paragraph (a) of the "Changes" clause shall be treated as a change under that clause; provided, that the Contractor gives the Contracting Officer prompt written notice (within 20 days) stating:

- (a) the date, circumstances, and applicable contract clause authorizing an equitable adjustment and
- (b) that the Contractor regards the event as a changed condition for which an equitable adjustment is allowed under the contract

The Contractor shall provide written notice of a differing site condition within 10 calendar days of occurrence following FAR 52.236-2, Differing Site Conditions.

G.9.0 Zoning Approvals and Permits

The Government shall be responsible for:

- obtaining proper zoning or other land use control approval for the project
- obtaining the approval of the Contracting Drawings and Specifications
- paying fees due for the foregoing; and,
- for obtaining and paying for the initial building permits.

H. CLAUSES

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://acquisition.gov/far/index.html> or, <http://farsite.hill.af.mil/search.htm>

These addresses are subject to change. If the Federal Acquisition Regulation (FAR) is not available at the locations indicated above, use the Dept. of State Acquisition Website at <http://www.statebuy.state.gov> to see the links to the FAR. You may also use an Internet “search engine” (e.g., Yahoo, Excite, Alta Vista, etc.) to obtain the latest location of the most current FAR.

FEDERAL ACQUISITION REGULATION (48 CFR CH. 1)

<u>Clause</u>	<u>Title and Date</u>
52.204-9	PERSONAL IDENTIFICATION VERIFICATION OF CONTRACTOR PERSONNEL (JAN 2006)
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards (JUL 2010)
52.209-6	Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (SEP 2006)
52.213-4	Terms and Conditions-Simplified Acquisitions (Other than Commercial Items) (AUG 2010)
52.222-1	Notice to the Government of Labor Disputes (FEB 1997)
52.222-19	Child Labor – Cooperation with Authorities and Remedies (AUG 2010)
52.222-50	COMBATING TRAFFICKING IN PERSONS (FEB 2009)
52.225-10	Notice of Buy American Act/Balance of Payments Program—Construction Materials (FEB 2000)
52.225-13	Restrictions on Certain Foreign Purchases (JUN 2008)
52.225-14	Inconsistency Between English Version and Translation of Contract (AUG 1989)
52.228-4	Workers' Compensation and War-Hazard Insurance Overseas (APR 1984)
52.228-5	Insurance - Work on a Government Installation (JAN 1997)
52.228-11	Pledges of Assets (SEP 2009)
52.228-13	Alternative Payment Protection (JUL 2000)
52.229-6	Taxes - Foreign Fixed-Price Contracts (JUN 2003)
52.232-5	Payments under Fixed-Price Construction Contracts (SEP 2002)
52.232-8	Discounts for Prompt Payment (FEB 2002)
52.232-11	Extras (APR 1984)

52.232-18	Availability of Funds (APR 1984)
52.232-24	Prohibition of Assignment of Claims (JAN 1986)
52.232-27	Prompt Payment for Construction Contracts (OCT 2008)
52.232-34	Payment by Electronic Funds Transfer – Other than Central Contractor Registration (MAY 1999)
52.233-1	Disputes (JUL 2002) Alternate I (DEC 1991)
52.233-3	Protest after Award (AUG 1996)
52.236-2	Differing Site Conditions (APR 1984)
52.236-3	Site Investigation and Conditions Affecting the Work (APR 1984)
52.236-5	Material and Workmanship (APR 1984)
52.236-6	Superintendence by the Contractor (APR 1984)
52.236-7	Permits and Responsibilities (NOV 1991)
52.236-8	Other Contracts (APR 1984)
52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements (APR 1984)
52.236-10	Operations and Storage Areas (APR 1984)
52.236-11	Use and Possession Prior to Completion (APR 1984)
52.236-12	Cleaning Up (APR 1984)
52.236-14	Availability and Use of Utility Services (APR 1984)
52.236-15	Schedules for Construction Contracts (APR 1984)
52.236-21	Specifications and Drawings for Construction (FEB 1997)
52.236-26	Preconstruction Conference (FEB 1995)
52.242-14	Suspension Of Work (APR 1984)
52.243-4	Changes (JUNE 2007)
52.243-5	Changes and Changed Conditions (APR 1984)
52.244-6	Subcontracts for Commercial Items (OCT 2010)
52.245-9	Use & Charges (AUG 2010)
52.246-12	Inspection of Construction (AUG 1996)
52.246-21	Warranty of Construction (APR 1984)
52.249-2	Termination for Convenience of the Government (Fixed-Price) (MAY 2004) Alternate I (APR 1984)
52.249-14	Excusable Delay (APR 1984)
52.249-10	Default (Fixed-Price Construction) (APR 1984)

The following clauses are set forth in full text:

DEPARTMENT OF STATE ACQUISITION REGULATION (DOSAR) CLAUSES

652.204-70 DEPARTMENT OF STATE PERSONAL IDENTIFICATION CARD ISSUANCE PROCEDURES (AUG 2007)

(a) The Contractor shall comply with the Department of State (DOS) Personal Identification Card Issuance Procedures for all employees performing under this contract who require frequent and continuing access to DOS facilities, or information systems. The Contractor shall insert this

clause in all subcontracts when the subcontractor's employees will require frequent and continuing access to DOS facilities, or information systems.

(b) The DOS Personal Identification Card Issuance Procedures may be accessed at

<http://www.state.gov/m/ds/rls/rpt/c21664.htm>

(End of clause)

CONTRACTOR IDENTIFICATION (JULY 2008)

Contract performance may require contractor personnel to attend meetings with government personnel and the public, work within government offices, and/or utilize government email.

Contractor personnel must take the following actions to identify themselves as non-federal employees:

- 1) Use an email signature block that shows name, the office being supported and company affiliation (e.g. "John Smith, Office of Human Resources, ACME Corporation Support Contractor");
- 2) Clearly identify themselves and their contractor affiliation in meetings;
- 3) Identify their contractor affiliation in Departmental e-mail and phone listings whenever contractor personnel are included in those listings; and
- 4) Contractor personnel may not utilize Department of State logos or indicia on business cards.

(End of clause)

DOSAR 652.236-70 ACCIDENT PREVENTION (APR 2004)

(a) *General.* The contractor shall provide and maintain work environments and procedures which will safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to contractor operations and activities; avoid interruptions of Government operations and delays in project completion dates; and, control costs in the performance of this contract. For these purposes, the contractor shall:

- (1) Provide appropriate safety barricades, signs and signal lights;
- (2) Comply with the standards issued by any local government authority having jurisdiction over occupational health and safety issues; and,
- (3) Ensure that any additional measures the contracting officer determines to be reasonably necessary for this purpose are taken.

(4) For overseas construction projects, the contracting officer shall specify in writing additional requirements regarding safety if the work involves:

(i) Scaffolding;

(ii) Work at heights above two (2) meters;

(iii) Trenching or other excavation greater than one (1) meter in depth;

(iv) Earth moving equipment;

(v) Temporary wiring, use of portable electric tools, or other recognized electrical hazards. Temporary wiring and portable electric tools require the use of a ground fault circuit interrupter (GFCI) in the affected circuits; other electrical hazards may also require the use of a GFCI;

(vi) Work in confined spaces (limited exits, potential for oxygen less than 19.5 percent or combustible atmosphere, potential for solid or liquid engulfment, or other hazards considered to be immediately dangerous to life or health such as water tanks, transformer vaults, sewers, cisterns, etc.);

(vii) Hazardous materials – a material with a physical or health hazard including but not limited to, flammable, explosive, corrosive, toxic, reactive or unstable, or any operations which creates any kind of contamination inside an occupied building such as dust from demolition activities, paints, solvents, etc.; or

(viii) Hazardous noise levels.

(b) *Records.* The contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this contract resulting in death, traumatic injury, occupational disease, or damage to or theft of property, materials, supplies, or equipment. The contractor shall report this data in the manner prescribed by the contracting officer.

(c) *Subcontracts.* The contractor shall be responsible for its subcontractors' compliance with this clause.

(d) *Written program.* Before commencing work, the contractor shall:

(1) Submit a written plan to the contracting officer for implementing this clause. The plan shall include specific management or technical procedures for effectively controlling hazards associated with the project; and,

(2) Meet with the contracting officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

(e) *Notification.* The contracting officer shall notify the contractor of any non-compliance with these requirements and the corrective actions required. This notice, when delivered to the contractor or the contractor's representative on site, shall be deemed sufficient notice of the non-compliance and corrective action required. After receiving the notice, the contractor shall immediately take corrective action. If the contractor fails or refuses to promptly take corrective action, the contracting officer may issue an order suspending all or part of the work until satisfactory corrective action has been taken. The contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any suspension of work order issued under this clause.

(End of clause)

652.242-73 AUTHORIZATION AND PERFORMANCE (AUG 1999)

(a) The contractor warrants the following:

- (1) That it has obtained authorization to operate and do business in the country or countries in which this contract will be performed;
- (2) That it has obtained all necessary licenses and permits required to perform this contract; and,
- (3) That it shall comply fully with all laws, decrees, labor standards, and regulations of said country or countries during the performance of this contract.

(b) If the party actually performing the work will be a subcontractor or joint venture partner, then such subcontractor or joint venture partner agrees to the requirements of paragraph (a) of this clause.

652.243-70 NOTICES (AUG 1999)

Any notice or request relating to this contract given by either party to the other shall be in writing. Said notice or request shall be mailed or delivered by hand to the other party at the address provided in the schedule of the contract. All modifications to the contract must be made in writing by the contracting officer.

652.229-71 PERSONAL PROPERTY DISPOSITION AT POSTS ABROAD (AUG 1999)

Regulations at 22 CFR Part 136 require that U.S. Government employees and their families do not profit personally from sales or other transactions with persons who are not themselves entitled to exemption from import restrictions, duties, or taxes. Should the contractor experience importation or tax privileges in a foreign country because of its contractual relationship to the United States Government, the contractor shall observe the requirements of 22 CFR Part 136 and all policies, rules, and procedures issued by the chief of mission in that foreign country.

I. LIST OF ATTACHMENTS

<u>ATTACHMENT NO.</u>	<u>DESCRIPTION OF ATTACHMENT</u>	<u>NO.PAGES</u>
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Attachment 2	Breakdown of Price by Divisions of Specifications	1
Attachment 3	Scope of Work (SOW)	42
Attachment 4	Cut Sheets (will be provided on site visit)	19

ATTACHMENT # 1

SAMPLE LETTER OF BANK GUARANTY

Place []

Date []

Contracting Officer

U.S. Embassy, [Post name]

[Mailing Address]

Letter of Guaranty No. _____

SUBJECT: Performance and Guaranty

The Undersigned, acting as the duly authorized representative of the bank, declares that the bank hereby guarantees to make payment to the Contracting Officer by check made payable to the Treasurer of the United States, immediately upon notice, after receipt of a simple written request from the Contracting Officer, immediately and entirely without any need for the Contracting Officer to protest or take any legal action or obtain the prior consent of the Contractor to show any other proof, action, or decision by an other authority, up to the sum of [Amount equal to 20% of the contract price in U.S. dollars during the period ending with the date of final acceptance and 10% of the contract price during contract guaranty period], which represents the deposit required of the contractor to guarantee fulfillment of his obligations for the satisfactory, complete, and timely performance of the said contract [contract number] for [description of work] at [location of work] in strict compliance with the terms, conditions and specifications of said contract, entered into between the Government and [name of contractor] of [address of contractor] on [contract date], plus legal charges of 10% per annum on the amount called due, calculated on the sixth day following receipt of the Contracting Officer's written request until the date of payment.

The undersigned agrees and consents that said contract may be modified by Change Order or Supplemental Agreement affecting the validity of the guaranty provided, however, that the amount of this guaranty shall remain unchanged.

The undersigned agrees and consents that the Contracting Officer may make repeated partial demands on the guaranty up to the total amount of this guaranty, and the bank will promptly honor each individual demand.

This letter of guaranty shall remain in effect until 3 months after completion of the guaranty period of Contract requirement.

Depository Institution: [Name]

Address:

Location: _____

Representative(s): _____

State of Inc.: _____

Corporate Seal:

Certificate of Authority is attached evidencing authority of the signer to bind the bank to this document.

ATTACHMENT # 2

UNITED STATES DEPARTMENT OF STATE
BREAKDOWN OF PRICE BY DIVISIONS OF SPECIFICATIONS

(1)DIVISION/DESCRIPTION (2)LABOR (3)MATERIALS (4)OVERHEAD
(5)PROFIT (6)TOTAL

1. General Requirements
2. Site Work

3. Concrete
4. Masonry

5. Metals
6. Wood and Plastic

7. Thermal and Moisture
8. Doors and Windows

9. Finishes
10. Specialties

11. Equipment
12. Furnishings

13. Special Construction
14. Conveying Systems

15. Mechanical
16. Electrical

TOTAL (Pak Rupees): _____

Allowance Items: _____

PROPOSAL PRICE TOTAL in PAK RUPEES: _____

Alternates (list separately do not total)

Offeror:

Date

PRICE BREAKDOWN BY DIVISION OF SPECIFICATION ITEMS

ATTACHMENT # 3

STATEMENT OF WORK

BACKGROUND AND PURPOSE:

- 1.1 The US Embassy Islamabad and Consulate General Lahore require renovation servicer at House # 45, C-1, Gulberg III, Lahore. The line items are indicated at the end of the scope of work.
- 1.2 The residential structure consists of brick wall with reinforced concrete slab. The exterior and interior walls covering consists of cement plaster, stone cladding, plastic emulsion and weather shield paint. The total area of the house and servant quarters is approximately 5,239 square feet.
- 1.3 The entire exterior of the building will be repaired/re-plastered. Contractor shall also plaster the perimeter wall with 1:3 cement sand plaster ratio. The contractor is responsible for verifying the exact locations of the repairs to the walls of the building that needs to be re-plastered/painted.

2.0 GENERAL REQUIREMENTS:

- 2.1 The work shall be executed in a diligent manner in accordance with a fixed performance period of **ninety (90) work days**.
- 2.2 The contractor shall be required to prepare reports, bill of materials, catalog cuts, schedules and cost estimates. These documents shall provide the necessary interfaces, coordination, and communication among the Embassy, Consulate General, and the contractor.

3.0 SCOPE OF SERVICES:

The contractor shall provide labor, material, equipments and supervision to complete the technical requirements in this statement of work. The contractor shall follow security directives as explained by RSO at Post.

The work consists of, but is not limited to, the following:

- 3.1 Remove all crumbling plaster from the exterior of the structure by using chisels, wire brushing or other effective means to get the required results. Remove crumbling plaster and scrape dirt from all ledges (front/rear and sides) sticking out of the walls. This item also includes servant quarters.
- 3.1a RE-PLASTER: Provide and lay at any height 1/2"-3/4" thick ordinary Portland cement sand plaster in ratio (1:3) one part of cement and three part of sand including lifting, hoisting, scaffolding, preparation of surfaces before plastering, corner beads, wire mesh on the joints where concrete and brick masonry surfaces meet, curing, finishing, chipping and cleaning. Contractor shall provide corner beads on the corners of the windows/door jambs, columns/walls corners. The work site, ground areas, and grates, external utilities etc will kept be clean at all times. This item includes roof water tank as well. All construction debris will be removed from the site on daily basis.
- 3.1b ACRYLIC BASE WHITE COLOR ROOFLEX: Provide and apply rooflex material acrylic base on top and sides of all ledges at least 2 times after surface preparation in accordance with the instructions of the manufacturer. The material should be anti fungus, anti bacterial and 48% acrylic binders. This item also includes roof water tanks. Remove debris from the roof, clean

outside, repair and paint with white color rooflex (Elastomeric coating), clean and seal all drains etc.

- 3.2 Remove all crumbling plaster from the interior surfaces of the building (interior walls and ceiling) including black lines, by using blasting, chisels, wire brushing or other effective means to get the required results.
- 3.2a RE-PLASTER: same as item # 3.1a.
- 3.3 PERIMETER WALL: Repair and plaster perimeter wall of the residence and per item 3.1a. Plaster required on front wall, side walls and back wall.
- 3.4 REMOVING/SCRAPING OF OLD PAINT: Remove/scrape all old paint from the interior and exterior surfaces of the building, metal grills, grill doors, gates, spikes, guard post, railings, exterior wood doors, and/or any other item that needs paint or polish by using blasting, wire brushing or other effective means. Work site, ground areas, window glasses and, external utilities etc will kept be clean at all times. This item includes all interior/exterior building, servant quarters, perimeter wall and guard posts.
- 3.4a WEATHER SHIELD PAINT AND PROFILE DÉCOR (GRAPHICS) AT EXTERIOR: Provide and apply one coat of an anti-fungal primer and three coats of weather shield paint on all pre-cleaned/scraped exterior surfaces. Contractor shall submit color scheme to COR for approval prior to buying the paint. The manufacturer's instructions are to be followed when thinning paints and in no case should thinners exceed 5% by volume. Paint should be stirred regularly unless otherwise recommended by the manufacturer. Most paints are provided in a condition ready for use. It is important that only those additions are made which are expressly permitted on the container labels. Material should not be used when either the shelf-life or the pot life has been exceeded. The dry period of one coat is three hours or as specified by the manufacturer.

All work should be done in a workman-like manner, leaving the finished surface free from drips, ridges, waves, laps and brush marks. All paints should be applied under dry and dust free conditions. The paint should not be applied when the temperature of the surrounding air is below 45 degrees Fahrenheit. Surfaces should be free from moisture at the time of painting.

Each coat of paint should be allowed to dry or harden thoroughly before the succeeding coat is applied. Only as much material as can be used in one hour should be mixed at one time. .

Over thinning will not be permitted. After the first coat the surfaces will be soaked evenly four or five times and the second coat should be applied after leaving overnight and film thickness of each coat of paint should be as specified by the paint manufacturer.

Provide and apply Jotun paints profile décor as per manufacturer instructions one to two coats of acrylic emulsion/tex primer, Jotashield filler and two coats profile décor with trowel applied as per approved color as per manufacturer recommended application and procedures. Or submit proposal as equivalent. This item includes all exterior building, servant quarters, and boundary wall in/out side and guard posts.

- 3.4b ENAMEL PAINT: Provide and apply three coats of enamel paint on all exterior window grills, grill doors, main gate, steel railing/pipes, spikes, windows, guard posts and or wherever required in the house. After surface cleaning/ preparation, apply rust preventive primer coat on areas where old paint is fully removed and welding joints areas. The type of primer and paint to be

applied shall be ICI paint and of approved shade by the COR. All primary paint should be applied by brushing. The thickness of each coat to be applied shall be in accordance with the paint manufacturer's specifications. Paint should not be applied when the temperature of the metal or of the surrounding air is below 45 degrees Fahrenheit. Surfaces should be free from moisture at the time of painting. Clean the site on daily basis and repair any damage to match existing shape during work.

- 3.4c **POLISH WORK:** Provide and apply three coats of polish on all wood door/windows, railing or where required. This item should be water proof and weather proof in all respects. Clean the site on daily basis and repair any damage to match existing shape during work. ICI woodcare system will be used as per manufacturer recommended instructions and procedures.
- 3.4d **PLASTIC EMULSION PAINT ON INTERIOR SURFACES:** Provide and apply one coat of an anti-fungal primer and two coats of plastic emulsion paint on all interior surfaces pre-cleaned/scraped prepared surfaces using ICI putty. Old paint must be removed from surfaces by scraping, wire brush, or grinding all surfaces. The color scheme shall be approved by the COR prior to applying the paint. The manufacturer's instructions are to be followed when thinning paints and in no case should thinners exceed 5% by volume. Paint should be stirred regularly unless otherwise recommended by the manufacturer. Most paints are provided in a condition ready for use. It is important that only those additions are made which are expressly permitted on the container labels. Material should not be used when either the self-life or the pot life has been exceeded. The dry period of the one coat is three hours or as specified by the manufacturer.

All work should be done in a workman-like manner, leaving the finished surface free from drips, ridges, waves, laps and brush marks. All paints should be applied under dry and dust free conditions. The paint should not be applied when the temperature of the surrounding air is below 45 degrees Fahrenheit. Surfaces should be free from moisture at the time of painting.

Each coat of paint should be allowed to dry or harden thoroughly before the succeeding coat is applied. Over thinning will not be permitted. After the first coat, the surfaces will be soaked evenly four or five times and the second coat should be applied after leaving at least overnight and film thickness of each coat of paint should be as specified by the paint manufacturer. This item includes all interior of the house, servant quarters, and guard post. More coats should be applied until to achieve the desired quality.

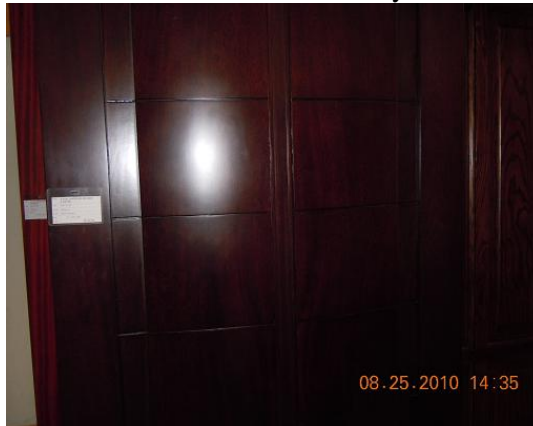
- 3.5 **SOLID CORE DOORS, MESH SCREEN DOORS AND CLOSETS:** Replace front, kitchen exterior entrance, bedroom and study room doors including mesh screen door on front and kitchen doors and all room closets. The exterior doors will be replaced with a yale lock (not less than 2000 rupees) COR to approve, heavy duty brass tower bolts 9" long, heavy duty brass kick and push plates, aluminum threshold, brass heavy duty hinges four on each door complete in all respects. Door shall be solid core with planks of 9" to 12" in width and height shall be as the full height of door such as 7'H. The thickness of solid wood shall be 1 1/4" thick. The teak or deodar wood ply 1/8" thick shall be fixed with glue on both sides of door. All doors shall be manufactured by interwood as per codes mentioned below and attached cut sheets. The lock for door shall be oriented as approved by the COR. One door peep hole viewer will be installed on door at the height 54" inches from floor. The peep hole shall be as approved by the COR. The contractor shall notify the COR about any problem or doubt/error for clarification/ rectification well in time to prevent any fabrication error. The door shall be installed in plumb with 6" long strong hinges four each and screwed or as approved by the COR. The door shall be polished on both sides as per existing door polish color. Remove old beading from the door frames and install new decorative beading on both sides of the door. The wood for door shall be deodar and with

teak wood ply on both sides. The front door shall have architectural design look. Contractor shall submit design for approval for the front door. Provide closets in each room manufactured by INTERWOOD.

Font door: Manufactured by INTERWOOD



Other exterior doors: Manufactured by INTERWOOD



Interior doors: Manufactured by INTERWOOD

Design = cross, zag, free

CLOSETS: Manufactured by INTERWOOD



Garage door shall also be replaced with a double-layer metal (16 gauge) door. Replacement door shall be approved by the COR prior to installation.

ventilators and window security grill of the house. Keep security grill, repair and re-install security grills with 6" anchor bolts @2' c/c after the installation PVC windows. Weld bolts with security grill frame. Repair windows jams in plumb and right angle, use galvanized iron corner-bead on corners and wire mesh on masonry and concrete joints. Use cement sand mortar with ratio 1:3 for new jams, sill and heads of window opening. Clean, prime with rust preventive primer, and apply three coats of enamel paint on security grills. Follow manufacturer recommendations and instructions to apply paint. The brand shall be ICI. Color shall be approved by COR.

- 3.6a Provide and install uPVC double glazed windows and ventilators of Win-pak make or equivalent with fixed/sliding/open able/top hung windows and ventilators shutters using approved sections for frame and shutters, including 6 mm thick imported tempered glass inside and 6 mm thick imported tempered glass outside and 20 mm cavity between two glasses (frosted glass in windows and ventilators of toilet areas), open able/sliding fly proof shutters with fly/insect screen in open able sections of windows/ventilators, matching hardware, handles, locking arrangement, opening arrangement with approved stays, roller MATIX Japan make fixing with HILTI stainless steel screws, sealing the joints between uPVC sections and adjoining surfaces with transparent exterior grade silicon sealant both inside and outside, weather strips, etc. complete in all respects as directed by the COR. Contractor can also take/check measurement at the time of site visit.
- 3.7 **BATHROOM UPGRADE:** Renovate all bathrooms of the house including servant quarters. Remove old tiles from walls and floor, old fixtures/ accessories, bath tub, piping etc. and install premium quality glazed ceramic tiles Spanish/Italian plain or pattern up to 7' high including strip design in two rows on all walls and 1½" half circle top molding with grouting and bonding for fixing etc complete, same for the floor but unglazed. The vanity and WC set of TOTO or equivalent approved color, GROHI fixtures, tower glass partition and glass door (½" thick tempered glass), toilet paper holder, soap dish, towel stand/rail, mirror, mirror light, marble vanity and RCC slab, cabinets of deodar wood with waterproof polish, new sewerage and water system, sink faucets, all associate electrical works, metal steel exhaust fan (Climax made) and GFCI sockets, all American standards complete in all respects. Provide nonconductor layer of moisture in all the floors of bathrooms and kitchens consisting of three coats of multi grade hot bitumen over 1/8" thick polythene sheet. Remove all old plumbing piping from inside and outside of the house and install new piping including P-traps to prevent smell and insects from outside. The piping shall be uPVC class-E schedule-40 with schedule-80 fittings and PPR PN 25 for cold and hot water piping (DADEX PIPES), contractor can submit proposal in Galvanized piping medium grade for approval to COR. Install IIL galvanized piping of same existing size medium quality that can hold water pressure of 60psi from underground water tank to roof water tank and from roof tank to bathrooms and kitchen and other supply points in the house. After completion of installation and prior to cover, complete piping system shall be hydrostatically tested to 150 psig. Test shall be maintained for a minimum of 12 hours to prove all joints are tight. Recommended manufacturers for the bathroom fixtures, accessories are TOTO, and GROHI. Any item manufacturer of China is not approved in this project.



- 3.8 **TILE FLOOR:** Remove terrazzo, tile and carpet flooring all over the house including base concrete or install over terrazzo floor. However, contractor will warranty that tiles will not come up. Provide and install master granite tiles floor tiles 2'x2' in entrance hall, living areas of first/second floor, all rooms as per approved sample and skirting by using stile bond and grouting to fill up gaps. The gap between two tiles shall not be greater than 2mm. The top level of the tiles floor should not exceed the existing level of the floor or the room floor top. Tiles should be in right angle cut, any crack or unequal tile shall not be accepted for this project. Mark offsets before removing of exiting floor to maintain the top level equal with existing floor. Provide and install premium quality unglazed ceramic tiles Spanish/Italian on floor of the kitchen with grouting material. The recommended grouting material is STYLE BOND manufactured by Shabir. The gap between ceramic tiles shall be filled with grout manufactured by Shabir or as recommended by the tile manufacturer. Provide granite marble on steps of entrance door. The color shall be approved by the COR.

Provide and install exterior grade floor tiles on terraces of the house. Dispose of all construction material on daily basis and clean. All the steps involved should be checked and approved by the COR. Contractor shall be responsible to inform to COR for inspection and prior approval on each step.



- 3.9 **DRIVEWAY, TERRACES AND SIDE WALKWAYS UPGRADE:** Remove old drive way, back terraces and side walkways floors including base concrete and side curbs. Provide, lay, compact, finish and cure reinforced cement concrete 6" thick using ordinary Portland cement, lawrencepur sand and Margalla crushed stone by ratio 1:2:4 including formwork and vapor barrier to floor. The base concrete at any place of the house shall be 6 inches with re-bars 1/2" Ø @ 8" c/c. Provide and lay precast concrete curb stones manufactured by AZHAR on both sides of drive way over plain cement concrete base. Provide lay cast-in-place new terrazzo flooring of 1 1/2" thick in the driveway, and sidewalks over the concrete slab including 6mm thick glass divider @3' c/c both ways, with the ratio of one part of white cement and two parts of marble crushed stone of 8# to 9#. The color of the marble stone shall be approved by the COR. Provide

waterproofing layer under the base concrete prior to cast the concrete. Driveway shall be connected up to the street road including the side curbs. Remove old storm drains and provide new storm drains of reinforced concrete base and sides with mild steel angle iron grating. The space among the angle irons shall be less than the heel size. Grating shall be painted with three coats of paint over rest proof primer as specified above in the enamel paint section. Please note that terrace will be upgraded by tiles instead of terrazzo floor. Contractor shall provide samples for approval before start the work.

Terrace Tiles



- 3.10 **MAIN GATE:** Provide and install main gate including RCC columns on sides, glove type lights on columns, wiring for gate lights, and cement sand plaster of 1:3 cement sand ratio, curing, two feet fishhook spike of same design of existing on top of gate and gate columns, paint of approved color on gate, spike and column as per attached drawing complete in all respects. Construct new guard foundation 4 feet high from ground with steps, reinforced concrete side walls (6" thick) and top slab (6" thick) with re-bars $\frac{1}{2}"\varnothing 6"$ c/c. The footing of the wall shall be 18" wide and 9" high, Footing re bar shall be $\frac{1}{2}"\varnothing 6"$ c/c both sides. Contractor will obtain COR and RSO approval prior to installation of main gate.
- 3.11 **SERVANT QUARTERS AND LAUNDRY:** Renovate servant quarters and laundry, remove all crumbling plaster, re-plaster and paint the entire interior and exterior as per exterior finish mentioned above in item # 2.4a. Remove all plaster from outside and re-plaster with fine sand and cement, the ratio shall be 1:3 for all exterior plaster and repair work. Remove and install new solid core doors in rooms with deodar wood frame as per item 2.5 including mesh screen door where required. Install double-layer metal doors (16 gauge) on servant quarters bathrooms. Remove and replace obsolete and/or inadequate plumbing and drain fixtures in laundry. Provide and install utility storage cabinets. Cabinet materials and configuration to be approved by the COR prior to purchase and again prior to installation.
- 3.12 **ELECTRIC WORKS:** Remove old lights including fixtures and install new (up to Rs.5000 each), electric fans with lights (up to Rs. 5000), switch boards and switches all interior and exterior of the house. This item shall also include perimeter lights, security lights, event lighting system as specified by the COR and associated wiring works. Remove all outlets with SOKO type outlets included new wiring (phase, neutral and ground) for all outlets, switch sockets and for ACs wiring. Following are the manufacturer for electric products.

1. CLIMAX or PAK fans with decorative lights

2. MK or Clipsal or approved equivalent.
3. Philips or approved equivalent.
4. Pakistan cables for wiring.

Replace all associated electrical works to include obsolete breakers, panel boxes, GFCI sockets and wiring with grounding and including new conduit where required. All electrical works are to be brought up to National Electric Code standards. The electrical system of the residence shall be restored to complete, functioning condition and shall be tested and made ready for operation.

- 3.13 WATER TANK : Clean, check for any leak, repair leak with SIKA grout and disinfect underground and roof water tank according to procedures defined in IBC or local codes.
- 3.14 PLUMBING: Worn, obsolete and/or leaking water supply, sewer and drainage lines to be replaced. Water supply and sewage lines to be replaced to point of connection with mains shall be completed if required by the COR. Residential plumbing system shall be restored to full compliance with all plumbing, building and health codes and shall be complete, tested, functioning and ready for use.
- 3.15 Following are details of specs and SOW.

MASONRY FOUNDATION WALLS:

Introduction

This work includes building the masonry foundation, basement walls, concrete floor ledges, header blocks, pilasters, foundation vents, providing openings for basement windows and doors, and placing anchor bolts or straps, per the Plans. All work shall conform to the Plans, codes, and OSHA requirements. Be sure to clean and strike all exposed joints. Neatly stack any excess block.

Pre-Job Conditions

Check all materials prior to installation, especially blocks and footings.

Check setbacks.

Verify the location of windows, foundation vents, and any other openings specified in the Plans.

Prevent adjacent surfaces or materials from being stained by mortar, grout, or other materials used during construction/installation process.

Construction Methods and Standards

Protect, store, and handle materials properly. Protect materials from freezing. Keep cement materials dry. Cover masonry units and store off the ground. Protect mortar from water penetration and efflorescence. Do not allow mortar to freeze. Do not install blocks when temperatures are below 40 degrees.

Damp proofing (for basement walls that are not also retaining walls) shall be coated with 1/4 in. Portland cement mixed with a damp proofing agent.

Standard: Cracks in masonry foundation walls shall not exceed 1/4 in. in width, or 1/4 in. in vertical displacement.

Use reinforcements specified in the Plans and required by local code.

Install continuous horizontal reinforcement or reinforcing rods as required by structural drawings and code.

Control the amount of sand added to mortar; too little or too much sand will weaken the mortar.

Construct all masonry openings and beam pockets so that they are square, plumb and proper dimension.

The first mortar joint shall level out any footing irregularities but shall not exceed $\frac{3}{4}$ in. thickness.

Standard: Masonry walls intended to intersect at right angles shall be square to each other within 1 in. in 20 ft. along a diagonal line. The diagonal is established by the "3, 4, 5 triangle method".

The top course of a foundation wall shall be solid cap blocks, or filled with grout.

Standard: Masonry foundation wall courses and the tops of masonry walls shall be level to within $\frac{1}{4}$ in. in a horizontal distance of 20ft.

Install brick ledges per the Plans; verify height with the COR.

Independent beam piers shall be constructed of solid block or filled with grout.

Fill reinforced block cores entirely.

No separation shall occur between stoops or any other offset and the house. Stoops and offsets shall be finger laced or otherwise reinforced.

Point up all exposed joints on the block.

Install at least 2 anchor straps/bolts per individual segments of plates.

Install anchor straps/bolts every 4 ft. and within 12 in. at the end of each individual sill plate members, unless otherwise indicated on Structural Plans.

Install all vents, sleeves, and wall caps.

Foundation vents shall be sized and placed in conformance to the applicable codes. A calculation shall be made, and vents distributed accordingly.

Standard: Unless otherwise noted, the free area of all crawlspace venting shall equal at least 10% of the crawl space area. In addition, always review current code requirements.

Place foundation vents while block is being laid.

Foundation vents shall be made of materials that are rustproof and will not react with cement mortar.

Allow adequate time for mortar to cure before backfilling.

Standard: Allow at least 3 days of cure before backfilling block foundations at crawlspaces and 6 days at basement walls.

Clean-up:

Make sure that blocks are brushed down and any mortar droppings or tags have been knocked off. Remove mortar and grout stains.

Make sure that mortar droppings are cleaned off the footings.

All masonry shall be cleaned upon completion of work. Muriatic acid shall be used with the proper water-acid ratio. Use muriatic acid on mortar that is well hardened and cured at least 7 days. Take care to avoid burning mortar joints.

FLATWORK

Introduction

Flatwork includes, but is not limited to: garage slabs, walkways, driveways, and patios. Protect all concrete from adverse weather. Unless otherwise instructed by the COR, do not use additives in the concrete. Overspill of concrete shall be cleaned up immediately.

Construction Methods and Standards

Install all garage slabs and exterior flatwork with proper slope. Flatwork should be free from bumps, ridges, washboards, cracks, rock pockets, and blisters.

Standard: Cracks in basement floors and garage slabs shall not exceed 1/4 in. width and 3/16 in. vertical displacement.

For basement walls, follow the following standards:

Standard: Cracks in basement walls shall not exceed 1/4 in. in width. Voids shall not exceed 1 in. in diameter and 1 in. in depth.

Use a stinger or concrete vibrator in footings and stem walls over 1 ft. in depth for consolidation of concrete and to eliminate honeycombing.

All rock pockets over 3/4 in. diameter shall be filled.

Standard: Do not vibrate concrete for more than 15 seconds in anyone location.

Tape and securely wrap all through-slab plumbing and duct penetrations with an appropriate wrap material.

Garage Slabs

Garage slabs shall be sloped down from the rear of the garage, sloped down toward the garage door(s). Any ponding of water inside the garage area is unacceptable.

Standard: Slope the surface of garage toward garage doors at a minimum of 3 in. in a horizontal distance of 20ft.

If the garage is located at the bottom of a down-sloped driveway, the 2 ft. of the driveway closest to the garage slab shall be sloped away from the garage slab. It should slope to a swale at the rate of 1/4 in. per ft. The swale should drain to the side(s) of the garage, or contain a properly set strip drain with removable cover for cleaning that flows to a swale or storm drain.

Supply and install all reinforcing steel, dowels, anchor bolts and nuts, or other necessary hardware pursuant to the Structural Engineering Drawings. In the absence of such information in Structural Drawings, install in accordance with code requirements.

Supply and install embedded hardware, straps and hold downs pursuant to the schedule shown on the Structural Engineering Drawings. Verify with the COR the type, brand, etc. of embedded hardware to be used.

Garage slabs poured separate from foundations shall be a minimum of 4 in. thick. Use of 6 x 6 x 10 x 10 welded wire mesh or No.3 bars 18 in. O.C, e.w., that are set on carriages is an appropriate practice. Use of #4 bars is preferable. Conform to structural plan reinforcement schedules, layouts for other slabs, and surrounding foundations.

Provide and install bollards to protect appliances in the garage. Locate bollards as shown on the Plans. Before setting, check that the bollard location does not interfere with the use of appliances or encroach into required vehicle space.

Garage slabs shall be poured over a 6 mil. minimum polyethylene vapor barrier covered with 2 in. of pea gravel. The garage slab-to-stem-wall connections and connections to separately poured slabs shall have a 112 in. fiberboard expansion strip embedded in the joint.

Garage pedestrian doors do not need to have a threshold installed. However, it is preferable to slope the slab in the immediate door vicinity toward the exterior, to prevent interior ponding of water.

Install all boxes for plumbing, HVAC, and other contractors.
Steel trowel finish garage floor.

Driveways and Walkways

All exterior flatwork shall be a minimum of 4 in. (3 1/2 in. nominal) thick.

Pour the driveway slab 1/2 in. lower than the garage slab. A concrete driveway shall never be higher than the interior portion of the garage slab that it abuts.

Standard: Cracks in driveways shall not exceed 1/4in. in vertical displacement. Separations at control joints cut into driveways shall not exceed 3/4in. in width.

Install control joints between separate pours.

Install control joints in wet concrete based upon the thickness of the slab. Space at industry recommended intervals. For example, a 4 in. thick slab shall have control joints spaced 12 ft. o.c. each way, or less.

Standard: Cracks in walkway concrete shall not exceed 1/4in. in width and vertical displacement. Separations at control joints shall not exceed 1-in. in width and 1/4in. in vertical displacement.

Flatwork slabs shall not disintegrate to the point that excessive aggregate appears at the surface. Use an appropriate mix to ensure durable surfaces.

Standard: Flatwork surfaces shall not reveal aggregate in more than 5% of their surface areas. The term "aggregate" does not apply to intentionally "seeded", or exposed aggregate.

All exterior flatwork shall slope toward drainage, 1/4 in. vertically per 1 ft. horizontally.

Standard: Standing or ponding water shall not exceed 3/8 in. depth per a 1 ft. area of diameter. All water shall drain off or evaporate within 24 hrs. after cessation of rain, unless fog or overcast conditions persist.

Verify that the driveway approach conforms to maximum slopes permitted in applicable codes and public works regulation.

Unless otherwise directed by the COR, light broom finish all exterior flatwork and seal within two days after concrete is cured.

Note: does not apply to garage slabs, which shall have a steel trowel finish.

WINDOWS & DOOR

Windows

Window openings are to be plumb and square, with equal reveals on all sides.

Standard: Check window openings for square. The maximum difference in diagonal measure should be 1/8 in. for openings 20 sq. ft. and smaller, and 1/4in. for openings 20 sq. ft. and larger.

If windows and SGD's have vinyl frames, allow for expansion in strict accordance with the window manufacturer's installation instructions.

Do not nail window heads, unless recommended by the manufacturer. A better practice is to screw the window flanges to the frame with washer head screws at a schedule recommended by the window manufacturer.

Gaps between window head and head framing should be less than 1/4 in.

Finish window reveals at this time.

Door openings shall be plumb and square. Measure diagonal dimension across all openings to check for square (crossing dimensions shall be equal).

Doors

Check conformance of door openings with the Plans.

Check rough door openings for square and plumb. Correct as necessary. Door openings that are out-of plumb can cause door operation problems of the doors are not hung square and plumb.

Install headers at openings in conformance with the Plans.

Standard: The vertical and horizontal planes of doors should not vary from plane by more than 1/4in. Rough openings should permit installation of doors within 1/8 in. of level and plumb. French door leaves should align with each other. All doors should remain in any position in which they are placed, without opening or closing themselves.

Check for correct door swing.

In tight areas, such as powder rooms and laundry rooms, always check for door swing clearances with fixtures and appliances before completing the framing. Make corrections as necessary.

At exterior doors, check to make sure thresholds have adequate support, will set at correct height relative to adjacent floors and exterior paving, and can be properly flashed.

Window Flashing

Flash windows in accordance with AAMA, ASTM and window manufacturer recommendations. Install sill flashing first, with the bottom edge remaining loose so that succeeding weather barriers can be tucked under. Jambs are flashed second, with flashing "tails" extending over and just below the sill flashing. This flashing should be at least 6 in. above the window head opening. Heads are flashed last, with the flashing extending horizontally over and just beyond the jamb flashing.

After flashing the openings, set windows into openings using a generous amount of window manufacturer's approved caulking. Leave the bottom open so that any water that gets past the jamb caulking can drain out.

After setting and fastening the window in place, install self-adhesive flashing over the window fins in the same sequence as the flashing.

Glazing in doors and windows that are within 18 in. of a door in stairwells, or in bathrooms next to tubs/showers, or within 8 in. of the finished floor, must be tempered. Verify tempering by locating the etched label that so certifies.

Door Flashing

Flash doors in accordance with AAMA, WMDA, and manufacturer's recommendations.

Flash thresholds first. A metal or plastic pan is the preferred method for water protection. If self-adhered flashing material is used, clean and prime the surfaces to which the flashing will be applied. Follow the manufacturer's recommendations.

Flash jambs second. Jamb flashing extends down and over the vertical legs of the jamb and is caulked or otherwise sealed to it.

Standard: Jamb flashing should extend 1.2 in. up or above the door head opening.

Place head flashing under the sheet metal or other drip at the door head.

Standard: Head flashing should extend across and beyond the jamb . }lashing by 6 in.

Pick-Up

Re-check all door and window openings for correct width and height. Cross measure all such openings.

Check washer and dryer rooms or alcoves to verify that they are of adequate size to permit installation of appliances. If the opening does not have jambs or returns, 56 in. is minimum width. If jambs or returns are included, add the width of one jamb to 56 in.

Check any light soffit recesses for square, correct size, and level.

Check to see that anchor bolts and hold-downs are installed and that nuts have been fully tightened.

Check for missing studs in all locations and correct as necessary. D Verify complete and correct framing of ceilings, backing for handrails, accessories, etc.

Check medicine cabinet openings for location and correct size.

Verify that all entry and room areas are square, with particular attention to floors that will have linear patterned finish floor materials.

The framing foreman shall walk the unit with the COR and obtain a sign-off upon completion.

Scrap out the structure and place all scrap material in wood recycle boxes or areas specified by the COR.

Transfer all remaining rough hardware to the next unit.

PLUMBING

Introduction

Plumbing systems include domestic hot and cold water system piping and fittings; hot and cold clothes washer connections; a minimum of two exterior hose bibs per structure (check the Plans); water service from property line to structure including all required connections; drain, waste and vent systems, including piping fittings; installation of dishwasher and water heater; roof vent flashings; all required cleanouts and appurtenances; gas system from meter to most remote outlet with all piping, fittings, shutoffs, appurtenances and connections. The plumbing system shall be complete, tested, functioning, and ready for use.

All systems and fixtures shall be installed in accordance with all building, plumbing, and health codes.

Standard: Water supply piping, gas piping, wastewater piping, and fire sprinkler plumbing shall not leak, and shall convey 100% of the liquid or gas it is intended to convey.

Rough Plumbing: Rough plumbing consists of trenching within and outside the structure and garage footprint. This trenching is required for all piping installed below the surface of the building pad. The plumbing contractor is responsible for backfilling and compacting all below slab plumbing trenches. Trenching is also required for all gas and wet piping installed within structures.

Rough Materials:

ABS or cast iron waste pipes and vents; Use stubbed plastic ASS waste and vent system from the sewer clean out connection to existing outlet behind the curb, maximum length is 30 ft. Use two-way cast iron sewer lateral clean out, if required by the local governmental jurisdiction. Some

jurisdictions have prohibitions against the use of any plastic pipe within the area of the structure. Confirm local restrictions before proceeding.

Copper, CPVC, or cross linked polyethylene (PEX) supply line; verify specified type with COR.

Use PVC or copper water pipes (per city or agency requirements) to connect the water meter at the curb or other approved locations, maximum length is 10 ft.

Rough hubs, fittings, hose connections, valves, and caps.

Gas piping.

Vents.

Fire wall caulk.

Tub and shower pan protectors.

Schedule 40 PVC sub-drainage piping of specified diameter, perforated or non-perforated. This should be done according to function and as specified by the Project Geotechnical Engineer.

Construction Methods and Standards

Obtain and pay for any trade permits as required.

Dig plumbing trenches so that they can be pumped out after a major storm. Avoid day lighting trenches that are incomplete due to potential erosion damage.

Some trenches may be used as joint trenches with other utilities such as electrical power, telephone, etc. Understand and comply with joint trench requirements. After installation, check piping for proper location, slope, and support.

To avoid pressure loss, run underground water lines the shortest possible distance. Sleeve and insulate where water lines penetrate a concrete slab.

Perform a water system pressure test at each house before and after drywall is installed, or as required by the governmental jurisdiction. There shall be adequate pressure and flow at each fixture. Fixtures shall operate within 15 psi to 80 psi. There shall be one sewer tie in per structure, unless otherwise shown on the Plans.

Supply and install water pressure regulator to each structure if street pressure is above 60 psi.

Install water hammer suppressors in supply lines, as required by the local jurisdiction.

Install water line with recessed box for icemaker, if shown on the Plans.

Standard: Copper water supply lines shall not be placed in or under concrete foundation slabs.

Stake underground water lines, to prevent movement.

Brace waste and vent lines securely.

Provide a 3/8 in. copper supply, angle stop and air gap for the dishwasher.

Verify that no hot and cold water lines are crossed.

Insulate hot and cold water pipes for the first 5 ft. from water heater, per local or state code.

Provide and install insulation blankets on water heaters if necessary (most new water heaters are now internally insulated to meet energy code requirements).

Insulate all hot water lines passing in or through unconditioned air space, if required by local code.

Insulate cold-water piping where there is a likelihood of mold growth and condensation. Pipes shall not be subject to freezing during normal cold weather conditions. Protect pipes appropriately.

The main sewer and sewer lateral lines from house to main must be protected from silt and/or debris infiltration. Protect all open lines from foreign objects with tops or caps from the time of setting ground plumbing in trenches until topout.

Provide roof vents to the roofing contractor in a timely manner. Vents are to have neoprene or better weather protection for vent stacks as required.

The fireplace log lighter, if applicable, shall be a minimum of 16 in. from the outside edge of metal fireplace box.

Supply gas line outlet to FAU, cook top, water heater, and fireplace appliance or log lighter (if applicable). Provide a 90-degree 1/2 in. galvanized fitting at the end of log lighter. Use fireproof caulking where the log lighter penetrates the firebox and at all places required by code, or as directed by The Building Official.

All gas lines shall be properly secured, and drip legs installed at lowest point of all drops.

Cap all gas openings.

Test all gas lines at 42 psi pressure.

Connect the gas meter after testing and approval of all gas piping.

Verify that dissimilar metals are not touching.

Second floor tubs are to be set on a manufactured mat to reduce squeaks. If required, supply and install ledgers. Supply and install protective liners in all tubs and shower pans, and keep this protection in place throughout construction.

For fiberglass and acrylic tubs and shower surrounds, install a layer of vermiculite in the space between the fiberglass / acrylic and the rough surface behind, per code and the manufacturer's instructions.

If at all possible, avoid drilling or cutting holes and notches into structural members. As a guide, bearing studs cannot be notched more than 25%, and nonbearing studs cannot be notched more than 40% of the stud depth. Holes drilled in studs cannot exceed more than 40% of the stud depth or be within 5/8 in. of the edge of the stud. Notches in joists or beams are not allowed in the middle third of the span. Notches in the ends of joists cannot exceed 25% of the joist depth. Notches in the bottoms or tops of joists cannot exceed 16 2/3%, or 1/6 of the overall joist depth. Holes drilled in joists cannot be within 2 in. of the bottom or top edges or exceed 33 1/3%, or 1/3 of the joist depth. The location of notches and holes within the span of joists is critical. Do not allow beams or rafters to be notched or drilled until approved by the Project Structural Engineer in writing. If these specifications cannot be followed, subject to the approval the Project Structural Engineer, add a second reinforcing joist.

Install a water heater that meets the applicable energy codes and supplies hot water to all appropriate fixtures, per the Plans.

If required by Code, install security straps on water heater and connect straps to frame members with lag screws.

If the furnace is located in the attic with air conditioning, the condensate drain and pan drain must be run from furnace location. If local code requires drywells for condensate drains, install in those areas accordingly.

Pan drain must daylight at the exterior of the house and may require a return trip to hook up.

Rout all necessary piping for condensation lines in concealed areas to outside locations ready for drywell, conforming to the requirements of the code.

Connect all coil overflow pans to PVC drains.

Install a condensate drain, as required.

If required by the Builder, videotape the sewer line between the cleanout at the house and the street connection.

Issue a certificate of completion (certificate must indicate the lot and date of completion), Signed off by the COR.

Properly set water meter boxes before the house final inspection.

Topout

Topout consists of domestic water, with any pressure regulator required by the local jurisdiction; gas and drain systems; waste and vent systems complete in all concealed locations; vents complete through the roof; house and sewer connection completed and backfilled; and all inspections passed.

Finish

Finish consists of all fixtures set, all trim installed, all connections made, water heater installed, all systems complete and operational, final plumbing inspection passed, and the premises ready for occupancy.

Use approved caulking in bathrooms, applied per manufacturer's specification. Verify acceptable caulking types with the COR.

Toilets are to be placed with caulking after vinyl, tile, hardwood floors, or other floor finishes are installed. Properly level and secure all fixtures.

Adjust toilet mechanisms so that water does not run continuously through the overflow pipe or flapper valve.

During toilet installation, make sure that the wax ring seals the toilet base to the waste pipe tightly, without leaks. Press the toilet frames onto the wax ring to make a complete seal.

Remove aerators before testing faucets. Test all fixtures for filling and draining.

Standard: All fixtures shall operate as intended and all drains shall flow freely at the time of delivery.

Faucets shall be installed so that they do not leak at the time of the Walkthrough, with all washers and cartridges seated tightly.

Standard: Tubs and sinks shall be installed so that water does not drain past the stopper (when engaged) at more than 1 in. per hour.

Do not install tarnished, chipped, or otherwise defective fixtures, toilets, or tubs and showers. Any chips, marks, or discolorations shall be less than 1/32 in. wide.

Clean fixtures from any soiling or debris.

Brass fixtures shall not be tarnished at the time of delivery.

Verify that all faucets, showerheads, spouts, and seats are properly secured. Showerhead pipes and tub spouts shall be secured so that they cannot move in or out more than 1/4in.

Cleanup

Cleanup any debris created by plumbing operations on a daily basis. This includes sweeping, if necessary, and placing debris in front yard debris box or in front yard piles, as instructed by the COR. Store and maintain all useable materials in an organized manner. The jobsite container and storage area shall be kept orderly and free of excessive accumulations of waste. Do not use the toilets in the houses, at any time.

GUTTERS AND DOWNSPOUT**Introduction**

Install gutters and downspouts per the Plans, so that they are sealed, waterproof, and direct water from all roof areas to specified locations. The gutter and downspout system shall be of sufficient size, shape, and design to effectively conduct normal amounts of rainfall off the roof and away from the house foundation. Gutters and downspouts may be specified as GSM that require painting by other contractors, or may be integral color aluminum that does not require painting. This Section also includes tolerances and construction methods for aluminum gutters.

Standard: Install an adequate number of downspouts to effectively handle rainfall typical for the climate. The frequency and cross-sectional area of downspouts must be adequate to serve the maximum flow of storm water. Establish water volume, distribution, and sizes of downspouts, by

performing SMACNA (Sheet Metal and Air Conditioning Contractors' National Association) or equivalent calculations.

Pre-Job Conditions

Verify the gutter and downspout material and color with the COR.

The following work shall be completed prior to installation of gutters and downspouts: front railings and posts, exterior masonry and siding, painting of siding, soffit, and fascia (if shown). Inspect the fascia board before installation, and inform the Project Superintendent of any defects or insufficiencies. Prior to starting work, verify corrections.

Construction Methods and Standards

Gutters

Install gutters on secure and sound understructures.

Gutters shall be sloped down toward the nearest downspout, if the house frame permits.

If frame is level, gutters shall be hung level. Always check to make sure that no gutter is installed sloping away from downspouts ("reverse-sloped"), and correct as necessary.

Standard: Gutter-to-downspout connections shall be watertight.

For aluminum gutters, never combine dissimilar metals without providing adequate and permanent separation. For example, do not use accessories made of copper, steel, etc. unless they are adequately isolated from aluminum.

Use a splashguard for long valleys, if the gutter is small.

If required in the Plans, install gutters for the entirety of the roof system, running completely along the eave. If an exception to this must be made for design or other reasons, use a dutch gutter, or other type of diverter (over an entryway, for example), as shown on the Plans.

Gutters shall not exceed 60 ft. in length unless they are provided with a built-in expansion joint.

Spikes and ferrules shall be placed 24 in. o.c. into fascia or rafter tails.

Use screwshank nails to fasten gutters.

Use hidden brackets on 2 ft. centers to fasten the back edge of the gutter to the fascia.

Place and seal or solder end caps onto the ends of gutters.

Gutters shall terminate no closer than 1 in. to the surface of intersecting walls.

Gutter ends shall never be embedded into stucco.

Downspouts

Standard: Install an adequate number of downspouts to effectively handle rainfall typical for the climate zone. The frequency and cross-sectional area of downspouts shall be adequate to serve the maximum flow of storm water. The number of downspouts should conform to the location and number of valleys and hips, slope of the roof, and total area of the roof.

Fasten downspouts securely to the house, using at least 2 fasteners per 10 ft. Make sure fastener penetrations are made watertight by pre-drilling and filling with caulk.

Secure all sections together with pop rivets or sheet metal screws.

Terminate downspouts into splash blocks, downspout extensions, or a drainpipe that runs away from the house.

Do not drain downspouts into landscaped areas that are surrounded by concrete. Pipe and daylight the downspouts under walks/driveway/flatwork to allow water to effectively run away from the structure.

ELECTRICAL

Introduction

Provide all supervision, labor, materials, tools, and equipment necessary to complete electrical wiring per the Plans. All work is to be in accordance with the currently adopted National Electric Code and supplementary local codes. Verify all code requirements with the local building department.

Standard: The electrical system shall be complete, functioning, tested, and ready for operation.

Rough Electric

Rough electrical work includes the installation of the electrical service and sub-panels, ready for energizing; all outlet boxes; switches; light fixture outlets; and the installation and connection of all wiring.

Rough Materials: Obtain and pay for any trade permits as required Wire and cable Panels (main and sub) Boxes (plastic or metal, depending upon building type) AC disconnects

Connectors, staples CATV and telephone interface boxes FAU switches # 10 and smaller wiring to be copper only

Construction Methods and Standards

Before starting work, make sure the requirements of the municipal jurisdiction are understood. Some jurisdictions require the installation of a ground rod in addition to UFER grounding.

If at all possible, avoid drilling or cutting holes and notches into structural members. As a guide, bearing studs cannot be notched more than 25%, and nonbearing studs cannot be notched more than 40% of the stud depth. Holes drilled in studs cannot exceed more than 40% of the stud depth or be within 5/8 in. of the edge of the stud. Notches in joists or beams are not allowed in the middle third of the span. Notches in the ends of joists cannot exceed 25% of the joist depth. Notches in the bottoms or tops of joists cannot exceed 16 2/3%, or 1/6 of the overall joist depth. Holes drilled in joists cannot be within 2 in. of the bottom or top edges or exceed 33 1/3%, or 1/3 of the joist depth. The location of notches and holes within the span of joists is critical. Do not allow beams or rafters to be notched or drilled until approved by the Project Structural Engineer in writing. If these specifications cannot be followed, subject to the approval the Project Structural Engineer, add a second reinforcing joist.

Mark locations of main electrical, panel, electric meter, telephone, and cable interface boxes prior to setting riser locations.

Aluminum wiring must be connected with devices approved for aluminum. The base of terminal lugs should be coated with anti-oxidizing compound.

Install 2 risers with a long sweep for phone and cable lines. Install one riser with a long sweep for electrical lines in the foundation. Install risers prior to pour at service trench and in accordance with requirements of gas, electric, telephone, and CATV utility agencies.

Verify the requirements of these agencies prior to installing. Install these sweeps in separate stud bays.

Secure all horizontal runs, and make sure all vertical runs are plumb.

Provide and install copper UFER ground bonded to reinforcement cage, or other approved grounding.

Tighten all screws for connectors and couplings to assure proper ground.

Kitchen counter outlets shall be mounted horizontally with the bottom of the outlet approximately 12 in. above finished countertops, and coordinated with the grout line modules.

Provide lighted address lights if required.

Wire bath fans and primary lights together to function off of one switch.

Install all boxes with appropriate reinforcement to support the intended fixture.

Walk house to verify that all conduits are tied in.

Verify that all wires are contained within boxes, to protect them from damage.

Pull all branch circuits and all home runs to panel. Make sure all wires are properly identified.

"Ring out" all electrical wiring prior to the frame inspection.

Protection of Work

Protect all penetrations through studs and plates by nailing metal protection plates on the surface of the plate or stud to receive drywall.

Do not use oversize drill bits when drilling through any framing material, plates, shear walls, and drywall.

All cable wiring must be looped so as to create a home run to the sub-panel or interface. Before completing the work, all breakers in the main panel and sub-panel must be clearly labeled. Do not use a broad tip felt pen for this task.

Make a final trip to check all outlets and make sure they are operational after electrical meter is set.

Provide framing contractor, COR and drywall contractor with an exact layout of all recessed lights.

FINISH ELECTRICAL

Introduction

Basic finish electrical includes the furnishing and installation of outlets, switches, cover plates, furnace circuit, and laundry circuit, per the Plans. The work shall also include hanging of light fixtures, finish telephone and cable box, and ground fault interrupters in the kitchen, bathrooms, and exterior outlets.

All work is to be in accordance with the currently adopted National Electric Code and local codes. Verify all code requirements with the local building department.

Construction Methods and Standards

Sub-panel breaker circuits shall be clearly identified by labeling.

All plates to be of the color selected by the Builder.

Use rocker style light switches unless otherwise directed by the COR.

Light switch plates, outlet plates, and recessed light trim shall be installed tight to the drywall surface.

Standard: Light switch plates, outlet plates, and recessed light trim shall not have a gap of more than 1/8 in. between the drywall surface and the back of the plate or trim.

Supply and install any keyless fixtures, making sure they have proper grounding.

Install appropriate bulbs (to be provided by others).

Wire all appliances per the Plans.

When dark granite or dark tile is selected for countertops and backsplashes, install black (or other dark color as selected by the COR) electrical cover plates at the backsplashes in order to blend with the dark granite or tile.

Electric Light Fixtures

Schedule the ordering and delivery of fixtures. Specify any options or extras for the house when placing the order.

Verify that all light fixtures and materials are in each box before signing the receipt of delivery from the supplier. Inspect all materials for defects.

Take appropriate precautions for handling and storage after delivery. The supplier is responsible for damaged fixtures, both before and after installation, unless such damage is the result of improper storage on-site, careless handling, defective installation, or defective workmanship.

Do not install tarnished fixtures.

Furnish and install door chimes.

Install surface light fixtures.

Install recessed lights.

Install any special fixtures supplied by others. Obtain list of such fixtures from the COR before starting work.

If shown on the Plans, the lighted house number must be visible from the street.

After the electrical meter is set, make an additional trip to check all outlets and make sure they are operational.

STUCCO

Introduction

Standard: All lath and plaster shall be installed in a manner that ensures the building will be free from exterior water intrusion.

Keep all roofs, gutters, downspouts, scuppers, drains, etc. clean and free of stucco debris and residue. In the event that scaffolding must be attached to roofs, walls, fascias, etc., make all repairs necessary to return these items to their original proper condition after completing stucco work. In no case shall any trace of wires, braces, etc., be noticeable in the finished product.

Materials must be applied using recommended curing times and moisture content that are consistent with prevailing weather conditions.

Pre-Job Conditions

Verify the texture, and color scheme(s) for each unit or individual building with the COR.

Before beginning any stucco application, inspect weather barrier for proper laps. Inspect all window and door flashings to determine completeness. Report any improper flashing or "papering" installations to the COR for correction, before beginning stucco work.

Prior to erecting scaffolding, walk all the units to note any broken windows, broken patio sliders, or other damaged exterior items. Notify the Project Superintendent of any broken windows or doors at this time.

Apply heavy gauge plastic covering to windows and exterior doors. Any doors installed before plastering shall be masked. All door and window frames shall be taped. Check with the manufacturers of windows and doors for proper protective measures.

Follow all OSHA requirements regarding scaffolding. Scaffolding shall always be safe and secure, with handrails when required.

Construction Methods and Standards

Use a minimum 60-minute Grade 0 paper moisture barrier. Two layers of moisture barrier are required over sheathing. Use of two layers at unsheathed locations is recommended, but is currently not required by Code.

Lath and plaster shall be applied properly so that buildings remain watertight.

Standard: For three-coat stucco, the total thickness of the application shall be 7/8 in. Any thickness less than 3/4 in. is unacceptable.

Standard: For one-coat stucco, the system application shall be 3/8 in. thick, plus the thickness of the foam board, unless otherwise specified by the stucco system manufacturer.

Apply a 5-12 in. weep screed at the bottom edge of all stucco surfaces.

All soffits shall receive a continuous metal vent installed perpendicular to the joists (unless the building fire ratings prohibit such openings).

If shown on the Plans, install expansion joint metal. If not shown on the Plans, allow for expansion joints in stucco wall planes with areas larger than 300 sq. ft. The location of expansion joints or control joints shall be approved by the COR and the Project Architect and shall be on an approved drawing.

On the areas covered by control joints, there shall be a layer of self-adhering, self-sealing membrane material placed over the paper and directly under the control joint.

Lath shall be completely covered, with none protruding through stucco.

Caulk all exterior building envelope penetrations as part of the lathing operation. Keep all electric boxes, vents, cement work, brick work, sills, jambs, sliding doors, etc. free of lath, stucco, and residue.

Wood trim, beams, and structural members may be embedded into stucco, if properly flashed. Consult with the COR and Project Architect before proceeding. Run water resistant building paper continuously behind the wood. Seal joints between embedded wood and stucco.

Comply with these minimum curing times (longer curing times are preferable):

Scratch coat: 3 days. Spray with water if air temperature is above 80 degrees F, or if it is windy.

Brown coat: 7 days. Spray with water if air temperature is above 80 degrees F, or if it is windy.

Texture coat: Allow 7 days before painting or applying the color coat.

All coats of stucco shall be applied with the proper sand-to-cement-to-water ratio. Follow adequate curing times to ensure that the coats do not separate from one another. Sand must be clean and free from any impurities.

Stucco shall not crack excessively.

Standard: Crack Tolerances -All exterior stucco covered walls, soffits and garden walls shall not have cracks that exceed 1/8 in. in width or 1/8 in. in adjacent surface displacement. Multiple cracks less than 1/8 in. that cover more than 33% of a 1 foot square area of a dry wall surface indicates an improper mix or an improper cure, and is unacceptable.

Foam plant-ons shall be supplied and installed per the Plans, including foam shutters and decorative vent pipes.

Install approved self-adhering waterproofing membranes on the top all "horizontal" areas such as pot shelves, walls, balconies, pop-outs, plant-ons, etc.

Standard: Such "horizontal" surfaces should be sloped no less than 1 in. vertically in 12 in. horizontally. Be sure to verify that all horizontal sloped-to-vertical intersections are detailed properly.

All foam trim (including foam shutters) shall be two (2) pound density covered with approved fiberglass or plastic mesh. Install all foam enhancements after the brown coat. Install in

accordance with the manufacturer's specifications, such as using Probond, Drybond, or other approved adhesive.

Foam boards shall be completely covered by at least 3/8 in. of base and finish coat. Foam boards shall not be visible anywhere on the surface of a one coat system. Pay close attention to the detailing of places where foam boards butt against exterior openings (such as window and door trim).

Any required repair work shall be re-colored from one corner to the other corner, at full height, or properly fogged to blend the color coats.

Standard: Color coats shall have texture that matches, without variations that are visible at a distance of 6 ft. in indirect light.

Apply final color coat touch up, if required, after final grade has been achieved.

Remove all stucco from roof areas, gutters, fascias, and wood trim before applying paint or color coat.

Standard: No plate or course breaks in stucco shall be acceptable on any walls.

Break away all lath and plaster debris from the building line.

Scrape and wash debris from patios and other flatwork. Tie empty sacks for disposal.

Pull all plaster spoils a minimum of 18in away from house. Place them into a debris box specifically intended to receive concrete.

Wash mixers, hoses and guns only in areas designated by project manager.

FRENCH AND OTHER EXTERIOR DOORS

Introduction

French doors and other exterior doors such as front doors, rear doors, and garage pedestrian doors, shall be installed per the door manufacturer's recommendations and instructions. Garage doors and garage pedestrian doors may pass some rainwater into the garage since they are typically installed without thresholds.

Standard: Doors shall be installed so that they are watertight. Doors shall be hung so that they are level and plumb, and do not swing open or close by themselves.

Construction Methods and Standards

Rough openings shall be framed per the manufacturer's specifications.

Strictly follow the exterior door manufacturer's installation recommendations.

Flash all head, jambs, and Sills of doors correctly and in proper sequence. Flashing shall be "shingle" style and integrated with the house wrap or building paper. Flashing should direct water to exterior surfaces and away from penetrations. Do not use paper or sisal kraft flashing. Water shall not enter through top, sides, bottom, or under threshold of the door.

Install doors so that the vertical and horizontal planes of the door are level and plumb.

Standard: Doors shall be installed level and plumb, within 1/8in each way and shall not open or close by themselves.

Install all doors with the correct swing per the Plans.

French door leaves shall align with each other.

For French doors and sliding glass doors, install screws that go through the shims and into the header and sides of the door.

Install doors so that there is sufficient clearance between the door head and doorframe.

Standard: Doorframes shall not vary more than 1/4in. measurement from the closest distance to the jamb to the furthest distance to the jamb or head. The door must fit tight to the weather stripping.

Attach doorframe jambs securely to rough frame. With heavy or extra wide doors, it is recommended to attach doorframe jambs with long hinge screws that penetrate the rough jambs by at least 1-1/4in.

The bottoms of doors installed over carpeted areas shall be elevated over the highest carpet tufts by no more than 1 in.

Provide sill pan flashing set in mastic underneath the threshold of exterior doors. Pan flashing shall be formed to run up jambs at least 6 in. Prior to fastening, pre-drill and fill holes with mastic.

Exterior doors manufactured in wood shall be painted with a prime coat plus 2 finish coats. Prime coat shall be applied within 7 days of delivery to the site.

Install aluminum doors with aluminum screws.

Make sure that the latch plate on the lock side of the door is shimmed and nailed adequately.

For deadbolt installation, be certain the locking mechanism extends at least 1 in. into the jamb.

Install all door hardware. Use door hardware that is appropriate for the environmental climate conditions around the location of the structure.

WINDOWS AND PATIO DOORS

Introduction

Windows and patio doors shall be installed watertight, in accordance with the Plans and the manufacturer's recommendations. Refer to Section 3 Framing and Exterior Carpentry, subsections 3.1.13 Windows and 3.1.18 Window Flashing for additional information.

Pre-Job Conditions

Determine with the COR whether drywall is to be stocked after window installation. If the openings are too small, coordinate with the COR and the framing contractor, those windows that should not be installed until later. Also determine which openings in the frame may need to be temporarily altered to accommodate the stocking process.

Verify the style, brand, etc. of windows with the COR.

Bring any broken, scratched, or otherwise imperfect glass to the attention of the COR prior to installation of windows.

Notify the COR of any dual pane windows that are "foggy" or appear to contain condensation.

Construction Methods and Standards

Rough openings shall be framed per the manufacturer's specifications. A general recommendation is 1/2in. clear per side for jambs, 3/4 in. for head. Vinyl frame windows require more clearance than aluminum or wood frame windows.

Avoid inserting framing shims or drywall between the interior window frame and the rough frame. On vinyl Window particularly it is important to allow for the frame to extend and contract with temperature changes.

Correctly flash all head jambs, and sills of door in proper sequence. Flashing shall be shingle style and integrated with the house wrap or building paper. Water should not be directed to exterior surfaces and away from penetrations. Do not use sisal kraft or paper flashing.

Install windows and doors in a closed and locked position.

Standard: Windows shall be of appropriate AAMA rating for the geographic area of the building and shall not leak under normal weather conditions.

Windows should be of the correct STC rating conforming to the local requirements for noise abatement inside the building.

Windows should conform to minimum infiltration and energy ratings for the geographic area of the building.

Aluminum and wood windows shall be nailed or screwed, if the window manufacturer recommends, 12 in. to 16 in. o.c. around the window flange. Heads shall not be nailed unless otherwise directed by the manufacturer's instructions.

All nailing flanges shall be back-caulked with a 35-year rated caulking compound that is approved by the window manufacturer. The bead of caulk shall be continuous and make an uninterrupted seal with the jamb and sill flashing. It should also make an uninterrupted seal with the header.

Jamb flashing shall extend at least 6 in. below the sill flashing so that the building paper can be tucked under both the sill flashing and the jamb tails. Do not staple sill flashing or jamb tails to any part of the building frame.

Aluminum windows shall be installed with aluminum nails.

Windows and window screens shall not be scratched or broken. Take care to prevent window glass and screens from scratches, tears, and breakage.

Standard: At the time of delivery, glass shall not be broken or visibly scratched when viewed from a distance of no less than 11 ft., under normal daylight conditions.

Secure dual pane glass per the manufacturer's installation instructions, so that the window grids do not drop down or disintegrate.

Follow the window manufacturer's instructions regarding trimming and shimming.

Standard: Windows shall be square, plumb, and level to 1/8 in. and shall operate freely and latch securely.

DECKS AND PATIOS

Introduction

Install decks and patios in accordance with the Plans. Decks and patios shall be constructed with careful attention to slope and the house-deck connection.

Construction Methods and Standards

Construct decks and patios with a solid traffic surface, and with a minimum slope away from the building or toward a drainage collector of 1/4 in. per horizontal foot.

Standard: Deck and patio surfaces shall be installed and finished so that no more than 3/8 in. of water accumulates in ponds or "bird baths", ponds not exceeding 1 ft. in diameter. All water shall drain off or evaporate within 24 MS. after cessation of rain, unless overcast conditions and heavy fog persists.

For enclosed decks, install deck or scupper drains with code compliant overflow drains.

For decks with a wood surface or composite deck boards ("spaced decks"), water shall drain directly through the deck to the ground below.

Construct structural members at spaced decks with pressure-treated lumber, or woods such as cedar or redwood that are naturally resistant to decay.

If pressure-treated lumber is cut onsite, treat the cut ends with an approved wood preservative. Treated lumber, fir, cedar, redwood, and composite board may be used for deck top boards.

Standard: OSB, particleboard, resin board, or equivalent shall not be used as underlayment for decks designed to receive a membrane coating.

Install deck ledgers with a GSM flashing material that runs behind the water resistant membrane, behind the exterior surface of the house, and over the top edge of the ledger. At spaced decks, flashing shall cover the top of ledgers completely, and turn down slightly to avoid water running under the flashing.

Fasteners, nail heads, and screws shall be flush.

Standard: Fasteners, nail heads, and screws shall not protrude above the deck surface by more than 1/16 in.

Construct patios on soils and sub-surfaces that are properly drained and compacted. Concrete patios should be constructed with reinforcing steel, either wire mats or rebar.

Standard: Concrete patios shall not develop cracks that exceed 1/4in. in width, or 1/4in. in vertical displacement.

If modular pavers are used, follow the manufacturer's installation recommendations. Decks shall not contain surface undulations more than 1 in. out of plane with the entire surface.

EXTERIOR PAINT AND STAIN

Introduction

Paint materials must be applied during proper weather conditions and in accordance with specific product recommendations. Exterior paints or stains shall present a consistent appearance and shall not peel, flake, or otherwise deteriorate during the manufacturer's warranty period.

Pre-Job Conditions

Exterior finish painting and staining shall be done after the completion and installation of all exterior materials that are to be painted: (i.e., exterior and garage doors, wood siding, soffits, fascia, exterior trim, gutter and downspout, porches and railings, etc.). All such items may require pre-priming and back priming. Check with the COR and adhere to Project Specifications.

Determine if stucco shall be painted or if it will receive a color coat from the plastering contractor.

Verify the schedule of colors and finishes with the COR.

Do not use clear oil based varnish coatings for exterior surfaces. They will turn yellow, peel and flake quickly under sunlight.

Factory prime coats often need to be supplemented with an additional coat of primer. Verify with the COR.

Comply with coating manufacturer recommendations regarding storage, coverage, drying times, application conditions, and general use.

Construction Methods and Standards

Prior to starting work, properly mask off doors, windows, garage doors and other items that are not to be coated.

Protect areas below, near, next to, or around areas that are to be painted with drop cloths or other appropriate protection.

Special precautions shall be taken to protect adjoining material or structures from paint drips and overspray (if using spray application). Protect windows, roofing, and other exterior materials that are not to receive paint. Also protect automobiles, neighboring houses and structures, etc. from drips and overspray.

Standard: Any overspray that reaches unintended surfaces and is clearly visible to the untrained eye at a distance of 5 ft. under normal daylight conditions is not acceptable.

Prepare surfaces to receive paint so that they are clean, dry, and free of dirt, grease, rust, or any other debris.

For metal surfaces, prepare with dilute acids or chemical bonding agents.

Fill or caulk any cracks, holes, nail holes, or defects prior to paint or stain application.

Unless otherwise specified, caulk all exterior siding and trim.

Do not use a water-based caulk to fill nail holes and joints in MDO or MDF trim. It will cause the material to swell.

Prime areas as needed prior to paint application (i.e. backs of shutters, overhead garage door jambs, door jambs, etc.).

If the paints and stains selected are not suitable for the exposure and climate zone for the house, notify the COR.

Standard: Paints shall not chalk or fade within the manufacturer's warranty period.

Any flaking, peeling, or checking that occurs within the warranty period must be repaired.

If the paints and stains selected are not reasonably resistant to the establishment and spread of mildews and fungi on exterior walls, notify the COR. Paint containing mildewcides / fungicides may be an advisable choice under such conditions.

Paint or stain shall completely cover the intended surfaces. There shall be no visible drips, streaks, spots, "orange peels", marks, or visible color variation on paint surfaces. Follow manufacturers recommendations for minimum paint thickness.

Standard: Brush marks or lap marks shall not be visible at a distance of 6 ft., when viewed in normal day light.

All painted surfaces shall be properly sealed or coated with a stain-blocking coating; "bleed throughs" are unacceptable.

Primed siding shall receive one heavy coat. Unprimed trim shall receive 2 coats -one when painting siding and one just before homeowner walkthrough.

If stucco is not color-coated by the plastering contractor, paint all stucco surfaces including trim and plant-ons. Use compatible paints made specifically for stucco. Do not use impermeable paints on stucco. If elastomeric paints are specified, make sure that permeability ratings are such that walls are still able to "breathe". Prior to applying any such paint, consult with paint manufacturer technical staff and paint consultants, to receive written approval.

Paint exterior wrought iron and wood railings with a prime coat and a second color coat.

Entry doors require full-gloss paint on exterior side.

Doors shall be painted or sealed on all six sides.

Paint all fascia boards before installation of gutters.

Sand and caulk paint grade handrails, pickets, and fillers prior to applying the final coat of paint.

FINISH CARPENTRY

Introduction

Supply all labor, tools, equipment, and materials necessary to complete finish carpentry work. Take care in handling and storing of all finish carpentry materials to avoid damage or soiling. Protect installed materials as necessary. Finish carpentry includes: installation and shimming of interior doors, door hardware, closet doors, trim and molding, window stools and door casing, handrails, baseboards, closet shelving, etc., per the Plans. Cabinets may also be included in the finish carpentry scope of work, and in subsection 9.4 Cabinets.

Pre-job Conditions

Verify with the COR if temporary front doors are being installed.

Store doors so that they are protected from moisture and light. Do not store doors flat. Take care not to damage drywall if doors are placed against walls.

Construction Methods and Standards

Interior Doors and Windows

Any interior wood door shall be painted with a prime coat and finish coat within 7 days of delivery to the site.

Protect all frames, jambs, and doors against warping, delamination, and splitting. Door panels shall not split to the point that light passes through.

Doors shall be installed so that they remain in an open or closed position, without movement when released.

Doors shall be shimmed, squared, and plumbed. There shall be 3 sets of shims on each side of the door one directly behind each hinge and one behind the strike plate. Do not shim between the head frame and the buck above the header.

Maintain a 1/8 in. margin between doors and doorjambs.

Glue miter joints and fit them tightly. Hold face nails back approximately 3-4 in. from the ends of the casing. Nail on the top and edge through the miter joint.

Nail casings into the trimmer, king stud and headers. Use finish nails that are set, puttied, and sanded (to be painted smooth).

Casing trim margins shall be consistent.

Standard: Casing trim margins shall be between 1/8 in. to 1/4 in.

Doors shall not warp.

Standard: Doors shall not warp more than 1/4 in. per 6 ft. 8 in. height.

Pocket doors shall not be warped such that they rub or bind in pockets.

Use rabbeted exterior doorframes no less than 1-1/8 in. thick.

Standard: Door fit tolerances shall not vary more than 1/4 in. from the closest distance to the Jamb to the furthest distance to the jamb or head.

Adjust all door clearances as appropriate for each type of flooring installation.

Standard: Doors shall be cut to leave a gap no larger than 1/4 in. above the top of carpet tufts.

Doors over a non-carpeted surface should leave a gap of no larger than 1/2 in. Doors over utility

areas (such as laundry rooms and pantries that have resilient finished surfaces) may have a gap of 1-3/8 in. from the finish floor.

Unless otherwise bored or directed by the factory, bore holes for 2-3/4 in. backsets at all entry doors and house to-garage door. Bore holes for 2-3/8 in. backsets at all other doors.

Set and putty all nails in wood to receive paint or stain. Nail trim with finishing nails of proper size to hold the member firmly without splitting the wood. Pre-drill if necessary. Fastening shall be tight.

Sand all finished wood surfaces to provide a uniformly smooth surface. Always sand in the direction of the grain.

Door Hardware and Other Hardware

Supply and install temporary locks on entry doors. All temporary locks shall be keyed alike. Provide at least 2 keys to the COR.

Install all key locks, privacy locks, dummy knobs, and security viewers per the Plans. All exterior locks shall be keyed alike and all deadbolts shall be single cylinder. Door hardware shall be securely installed according to the manufacturer's instructions. Do not install tarnished hardware.

Hardware installation includes:

Hardware specified and a security door viewer at each entry door.

A deadbolt and keyed knob lock at fire door, man doors, and all other exterior doors.

Privacy locks at all bathrooms and master bedrooms.

Dummy knobs at closets (where applicable).

Passage locks at all remaining interior doors.

Standard: Door latches shall engage firmly in the strike and shall operate smoothly, without significant effort to disengage the strike or deadbolt.

Install door bumpers so that doors and door hardware will not strike walls, cabinets, or other doors. Baseboard door bumpers are usually appropriate. Floor bumpers may be required at some doors. Do not use hinge pin door bumpers, unless approved by the COR.

Tag control keys provided with locksets for each unit with the appropriate address/lot number for each unit. Deliver them to COR in the envelope provided with hardware.

Install towel bars, towel rings, robe hooks, toilet paper holders, and other bathroom hardware securely to solid backing, per the Plans.

Towel bars shall be installed level.

Check the options list to make sure that all miscellaneous hardware has been installed.

Trim

Drywall taping and texturing shall be completed before delivering or installing trim.

Match grains and shades of trim as closely as possible.

Cut all trim joints square, neat, and tight between adjacent wood members.

Fasten all members solid with nails, screws, glue, or any combination of these which good workmanship demands.

If rough wood burrs remain from saw cuts, remove them. Fit wood members tight to adjoining plaster.

Apply wood trim as needed to close spaces remaining between wood and drywall.

Hammer marks or marks on molding, casework, and trim shall be avoided. Do not use waffle-headed framing hammers on trim.

Standard: Hammer marks or marks or marks on molding, casework, and trim that are visible from 6 ft. under normal light conditions are not acceptable.

Install finger joint base material at gaps between the tops of drywall and the undersides of kitchen counter materials at counter overhangs.

All joints shall be made with mitered cuts.

All finished woodwork shall be smooth and without any surface marks. Caulking or filling gaps is acceptable, provided filled areas blend in with surrounding surfaces. Do not use water based caulk on MDF or MOO; the nail holes will swell.

Standard: Gaps in finished woodwork shall not be noticeable when viewed from a distance of 6 ft. under normal light.

Check for splits in the ends of moldings. Replace if necessary.

Avoid gaps or separations between abutting pieces of molding, casework, or trim.

Standard: Gaps or separations between abutting pieces of molding, casework, or trim in excess of 1/16 in. are not acceptable. Separations at joints shall not exceed 1/16 in. width.

Provide and install paint grade shoe at all hard surface areas, except for the toe kicks of stained cabinetry. Install stain grade shoes and scribe molding at stained cabinetry (material provided by other contractors).

Finish nail holes or staples shall be set below trim surfaces. Holes shall be filled and finished.

Standard: Finish nail holes shall not be visible at a distance of 6 ft. under normal light.

Closets and Closet Shelving

Furnish and install closet shelving, poles, and hook strips, with pole brackets (where applicable) at least 4 ft. o.c.

Standard: Closet poles shall fit firmly into rosettes and shall not be held away from the inside end of the rosette by more than 1/8 in.

Particleboard shelves shall have filled and smooth finished edges. All shelving and poles shall be in strict accordance with the Plans, including double shelves and poles where shown. If the shelves are not cut to fit tight to the walls, use caulk to close gaps.

Standard: Gaps in trim and shelves in excess of 1/4 in. are not permitted, whether caulked or not.

Verify the location and size of shelves per the Plans.

Screw shelving supports directly into the studs or backing. A single shelf rod with pole shall be set at 65 in. above the finished floor. Double shelves and poles shall have shelf tops set at 84 in. above the finished floor.

Standard: Shelves shall be level by 1/8 in. within 6 ft. of length.

Most linen and pantry closets have 5 shelves. Verify this number with the Plans or COR.

Baseboards

Miter-cut all baseboard joints. Square cuts on baseboard joints are not acceptable. Inside corners shall be installed with a coped joint.

Baseboards shall be flush, level, and set to the correct height.

Standards: for carpeted areas, baseboards shall be installed 3/8 in. off the sub floor. For vinyl areas, baseboards shall fit snugly to the finish floor.

If vinyl, tile, or wood flooring is specified, install the baseboard and base shoe after the finish flooring is laid.

Use the longest possible baseboard lengths to avoid splices. Splices shall butt-lap with scarf joints.

Nail baseboard into studs and bottom plates with proper finish nails, 16 in. o.c., and within 8 in. of all corners.

All nails shall be set and puttied. Do not use water-based putty or caulk on MOF and MOO; it will swell the end cuts and nail holes.

Standards: Gaps between baseboards and painted walls shall not exceed 1/16 in.

Stairs and Handrail

Stairs must comply with all applicable codes. When trimming, the permanent risers and treads shall be of consistent height and width.

Standard: Tread and riser dimensions in a single stair run shall not vary from each other by more than 3/8 in., from the greatest to least dimension.

For carpeted stairs, leave a 1/8 in. gap between the stair tread and the skirt board. Nail the tread securely to the stair stringer, through the tread, and into the riser.

Anchor newel posts securely to floor joists, with glue and bolts passing through holes in sub floors. If the sub floor is concrete, anchor the posts to the stair assembly. Another acceptable method is using “invisible” anchor sets, set the posts on the sub floor.

Install balusters or intermediate rails no farther than 4 in. apart and in conformance to the applicable code. Stair handrails shall have a uniform incline.

All interior residential stairways must have a handrail mounted on at least one side. The handrail shall be between 34 in. and 38 in. above nosings. Handrail support brackets shall be well anchored, with 2 in. screws to studs.

Medicine Cabinets

All mounting screws shall be set flush within the medicine cabinet.

Firmly secure medicine cabinets. Any gaps around the trim edges in excess of 1/16 in. shall be caulked.

Standard: Medicine cabinets shall be level, and doors shall open and close as intended.

All shelves must be installed and not left at the bottom of the medicine cabinet.

PAINTING

Introduction

Provide all supervision, labor, tools, equipment, and materials necessary to perform a complete job of interior painting, staining, and caulking.

Pre-Job Conditions

Examine all surfaces to receive paint or stain including stair rails. Perform any caulking and sanding required and any other prep work as directed by the COR. Do not apply paint to any areas that are not adequately prepped for paint or stain. Look for damaged surfaces. Promptly notify COR of such damage.

Prior to painting, another contractor shall clean the building, after interior trim carpentry is installed. Notify COR if a building requires additional cleaning prior to painting.

Determine with the COR if painting or staining shop-fabricated cabinets is required.

Construction Methods and Standards

Do not paint over unclean areas. Do not paint when dust or debris may settle on newly painted surfaces.

Cover all bathtubs, showers, and vanities prior to painting bathrooms. Cover all finished flooring prior to painting to avoid overspray.

Standard: Overspray on adjacent surfaces that is visible from a distance of 5 ft. under normal light conditions is unacceptable.

Completely protect and remove paint from all prefinished areas: tubs, showers, cabinets, concrete flatwork, windows, vinyl and tile, etc.

Kitchens, kitchen/nook, bathrooms, powder rooms, water closet, rooms, and alcoves require semi-gloss paint. Color should match flat wall paint. Verify the finish schedule and color scheme with the COR.

All windowsills, casings, base, wall cap, stair cap and stair rails (if designed as paint grade) shall receive a 2-coat enamel finish. The first coat shall be a primer and the second an enamel coat.

Perform two wall brush downs. The first shall be at pre-carpet touch-up. The second shall be before final painting of the interior.

Standard: Runs, sags, orange peel, lap marks, holidays, and drips are not acceptable
caulk all wood-to-drywall joints, window frame-to-drywall joints, and windowsill joints that are to be painted. Perform all caulking, including that which is usually done, but not may have been completed by other contractors.

Doors, whether paint grade or stain grade, shall be painted or sealed on 6 sides.

Standards: all painted surfaces shall be properly sealed and coated in compliance with industry guidelines and standards; “bleed throughs” are not acceptable.

Paint heat registers and returns on walls and ceilings the same color as the wall or ceiling. Paint firebox faces black (if applicable) with proper heat paint. Protect tile from paint.

Prior to the homeowner walkthrough and at the direction of the COR, re-paint and touch-Up inadequately painted interior surfaces. Re-caulk as necessary to correct missing, failed, or improperly applied caulking.

Standard: Any flaking, peeling, or chipping that occurs within the warranty period is unacceptable.

Wash out only in areas designated by the COR.

All empty paint cans, lids, and other waste materials shall be disposed of off site, and in accordance with federal, state, and local codes.

Leave one (1) quart of each interior latex paint and enamel paint in the hall closet of each unit.

CABINETS

Introduction

Supply labor and material to complete the cabinets, including vanities. Layout cabinets per the plans. Take careful field measurements in order to fit cabinets precisely in their required locations. Verify with the COR whether shop built, unfinished cabinets (to be finished by other contractors), or factory manufactured pre-finished modular cabinets are required.

Pre-job Conditions

Carefully review the Plans to make sure cabinets will fit properly in each plan type, allowing for door and window casings, appliances, etc.

Double-check all dimensions and locations of windows. Verify pipe locations under the sink cabinet.

Verify with the COR, if the bathroom vanities are to be installed on a 2x4 base to raise them up.

If fabricating cabinets, furnish shop drawings with elevations to the COR for approval prior to fabrication. Shop drawings shall include, but not be limited to, all dimensions, openings, style, type of finish, and any special detailing required.

Field measure intended cabinet locations before commencing fabrication. Notify COR if finished openings do not conform to the designed cabinet sizes.

Furnish sample drawer and door faces for approval.

Verify the Builder's delivery schedule. Specify any options or extras required when the cabinet order is placed.

Inspect delivered and stocked cabinets for damage, defects, and quality of finish before accepting the order. Notify COR of any damage or defect.

Install cabinets before finish flooring is installed (unless installing an island cabinet).

Construction Methods and Standards

Shop Fabricated Cabinet

Finish all stain-grade cabinets to the following specifications: Pre-sand to remove scuffs, scratches and imperfections.

Apply one coat of stain, one coat of sanding sealer, and two coats of semi-gloss clear lacquer.

Fill holes with matching putty after the seal coat.

Apply one final coat to all white deco cabinets, after cabinet installation and prior to installation of the drawers and doors.

Carefully select material for stain grade or whitewashed cabinets to assure consistency in both grain pattern and color.

Standard: All shelving and cabinets shall be free of loose knots, voids, chips, and other imperfections.

All stain grade doors and face frames shall be solid wood. Laminate finishes are not acceptable. All stain grade materials shall be finished prior to delivery and installation.

Irregularities of wood color when cabinets are stained with a uniform stain color are acceptable.

Provide prefinished shoe and scribe molding at all stain grade cabinets (for installation by other contractors).

Supply and install corbels at all bar overhangs of 6 in. or more. Spacing of corbels shall be no greater than 32 in.o.c.

All paint grade cabinets shall be smooth, sanded, filled, and ready for paint.

Standard: Painted cabinets shall be uniform in color when viewed under normal lighting conditions from 6 ft. or more.

Pre-Finished Cabinets

Check the receiving ticket when cabinets are delivered to make sure the correct product is being received. Double-check the receiving ticket against the order form.

Inspect delivered cabinets carefully for any damage or defects.

Handle and store cabinets carefully, to avoid damage or soiling.

Provide pre-finished shoe and scribe molding for all stain grade cabinets.

Shop Fabricated and Pre-Finished Modular Cabinets -Installation Methods

These installation methods, construction practices, and workmanship standards apply to both fabricated and delivered cabinets.

Use the best trade practices when installing all cabinet work. Cabinets shall be scribe-molded to walls, to achieve a tight fit against the wall profile.

Standard: Level and square cabinets before securing in place. Cabinets shall be square, level, and plumb within 3/8 in. Slight shimming is acceptable to meet this standard.

Set cabinets so that tops are flush and doors are level and in line with one another.

Standard: The face frames of cabinets shall not be more than 1/8 in. out of flat plane with adjacent portions of other cabinet pieces.

Standard: Corners shall not be out of plumb more than 3/16 in.

Standard: Cabinet doors shall not warp more than 1/4 in. from the face of the frame. The same standard applies to when the door is flat, but the frame is warped.

Standard: Gaps between abutting doors shall not exceed 1/8 in.

Anchor all cabinets to building framing with at least 2 screws. Countersink and cover all screw heads. Screws must be fastened from inside the cabinet into a stud or least 2 in. do not nail cabinets to the walls.

Furnish and install all necessary trim and scribe molding. All crown molding at upper cabinets shall be 1 piece per 12 ft. span. Scribe and shoe shall be installed after cabinets are secured. Prepare kitchen base cabinets with a minimum 3/4 in. thick rough top for tile (tile to be installed by other contractors). Base cabinets shall not be more than 3/8 in. out of level.

Adjust the height of the flooring (for ceramic tile or hardwood floors).

Standard: Cabinets that are designed to fit flush with the ceiling shall not have any space or gap that exceeds 3/16 in. between the ceiling and the top of the cabinet.

Standard: Gaps at sections where cabinet cases are joined shall not exceed 1/32 in. for painted cabinets and 1/16 in. for stained cabinets.

Excessive gaps may be covered by using scribe molding.

Install approved metal stiffening devices on all pantries and storage cabinet doors over 42 in. in height.

Provide and install bumpers on all cabinet doors and drawers.

Standard: Adjust all doors so that they are level. All door hinge mechanisms and catches shall function as intended.

Install a 1x2 cleat at all banjo arms at Pullman tops.

Perform all necessary cutting and boring for other contractors (tile setters, plumbers, electricians, etc.). Holes for plumbing penetrations in base cases shall be drilled with the smallest possible drill size. All holes shall be cut neatly and accurately.

If cabinets are covered with a high-pressure plastic laminate, verify that there is no delamination at the time of installation.

After cabinet installation, check that all hardware, drawer pulls, etc. have been installed.

Prior to completion of work, perform a final adjustment of all doors and drawers to ensure proper alignment, operation, and clearance.

COUNTERTOPS

Introduction

Standard: Countertops shall be installed level and watertight, following specific standards for each countertop material. Backsplashes shall be tightly adhered to walls. All penetrations at faucets, sink rims, and backsplashes shall be watertight.

Construction Methods and Standards

Laminated Countertops

Store materials properly, away from heat and moisture.

Install laminate that is free of nicks, scratches, voids, or other defects.

Finished edges and seams shall be smooth and without gouges or ripples. There shall be no gaps at seams.

Laminate shall fit snugly against the wall; scribe as necessary.

Standard: Gaps between countertops and walls shall be no more than 1/16 in.

Fasten backsplashes to walls with an adhesive recommended by the manufacturer. Use approximately 1 in. spot of adhesive at every 10-14 in. of length. Use a silicone-based adhesive where the laminate and the backsplash meet.

Fixture cutouts shall be properly sized, without voids, and be sealed.

Countertops shall be installed relatively level.

Standard: Countertops shall be level within a 1/4 in. rise or drop in any 8 ft. *direction*.

After installation, protect countertops from damage. Do not allow finished countertops to be used as worktables or rest tools upon them.

Cultured Marble Countertop

Countertops shall be installed relatively level.

Standards: countertops shall be level within a 1/4 in. rise or drop in any 8 ft. *direction*.

Material installed shall be free from cracks, chips, blisters, or other defects, color swirls shall be consistent throughout the surface.

Warpage in materials shall be limited.

Standards: Warpage shall not exceed 1/8 in. per 36 in. length.

Inspect materials carefully for voids and depressions in the surface. Install materials that are relatively free of such voids and depressions.

Standards: voids or depressions in the surface shall not exceed 1/32 in. depth, and be no larger than 1 in. wide. There shall be no more than 4 such voids pr 8 sq. ft.

Install cultured marble with an approved adhesive recommended by the manufacturer.

Fasten sidesplashes to the wall with an adhesive recommended by the manufacturer. Use approximately 1 in. spot of adhesive for every 10-14 in. of length. Use a silicone-based adhesive where the marble and sidesplash meet.

Top and backsplash pieces shall fit together without gaps. Caulk these joints with a compatible and approved caulk. No gap shall be more than 3/16 in. wide before caulking.

Gaps between the backsplash and wall shall be caulked with a compatible and approved caulk.

Standard: Gaps between countertops and walls shall lie no larger than 1/16 in.

Caulk joints shall be minimized and uniform.

Use a paintable silicone caulk between countertops and plumbing fixtures/drywall.

After installation, protect countertops from damage. Do not allow finished countertops to be used as worktables or rest tools upon them.

Solid Surface Countertops

Install countertops that are free from stains, blemishes, or burns.

Install countertops relatively level.

Standard: Countertops shall be level within a 1/4 in. rise or drop in 8 ft. direction.

Bond adjacent pieces so that joints are inconspicuous. Joints may be “soft-seamed” with a flexible silicone adhesive.

Sand the surface, so that surface texture is smooth and consistent.

Backsplashes shall be tightly adhered to the wall.

Standard: Gaps between countertops and walls shall be no larger than 1/16 in.

After installation, protect countertops from damage. Do not allow finished countertops to be used as worktables or rest tools upon them.

Ceramic Tile Countertops

Since ceramic tiles vary in surface character (handmade, rough, manufactured), level standards vary.

Standard: Generally, the countertop shall be level to within 1/8 in. in any direction, in a horizontal distance of 8 ft.

Standard: Handmade tiles shall be measured from multiple equivalent high points. The average result shall be level within 1/8 in. in any 8 ft. direction.

Standard: Regular manufactured tiles shall be level within 1/16 in. above or below a line parallel to the surface. Adjacent tiles shall be no more than 1/32 in. out of level with each other.

Countertops shall never slope away from sinks.

Grout joints shall not vary more than 1/32 in. from widest to narrowest area.

Fasten backsplashes to walls with adhesives recommended by the tile manufacturer, and then grout.

Standard: Gaps between countertops and walls shall be no larger than 1/16 in. Install tiles with the appropriate and approved mortars or adhesives, so that they do not come loose from the underlying material.

Standard: Hairline cracks in grout joints are acceptable at areas where the tile surface abuts a dissimilar material (such as at the backsplash or sink). Excluding these joints, cracks shall not exceed 5% of the total length of the grout joint or any one installation.

Install tiles that are free from cracks, chips, or other defects.
Tiles used in a given area shall be from the same batch or lot and provide a consistent appearance in color and texture. Exceptions to this are trim tiles and intentionally contrasting designs.
Countertops near areas exposed to water (kitchens, bathrooms, etc.) shall be installed with adequate water-resistant systems so that water will not penetrate the countertop assembly.
After installation, protect countertops from damage. Do not allow finished countertops to be used as worktables or rest tools upon them.

Granite, Marble, and Other Stone Countertops

Variations in the color and veining of granite and marble are acceptable.
Stone countertop cracks shall be minimized. Comply with Marble Institute and other stone association installation recommendations, to achieve crack-free performance. Occasional cracking may occur nevertheless. Cracks within the following tolerances are acceptable.

Standard: Generally, Countertops shall not have cracks that exceed 1/32 in. width. Verify this standard for the type of product used with the Marble Institute, the American Society for Testing Materials, and Stone Industry Standards.

Countertop pieces shall not contain obvious variations in color and texture to the untrained eye.
Countertop pieces shall be of reasonably well-matched colors.
Install materials that are free from stains, burns, or other defects.
Backsplashes shall be tightly adhered to walls.

Standard: Gaps between countertops and walls shall be no larger than 1/16 in.

All penetrations at the faucets, sink rims, and backsplashes shall be watertight.
Install countertops so that they are relatively level.

Standard: Countertops shall be level within a 1/4 in. rise or drop in any 8 ft. direction.

After installation, protect countertops from damage. Do not allow finished countertops to be used as worktables or rest tools upon them.

FINISH FLOORING

Introduction

Supply labor, materials, tools, and equipment to complete the work of finish flooring. Perform all work in accordance with the Plans and all required codes.

Pre-Job Conditions

Finish flooring shall be installed over appropriate subflooring. Before starting, always inspect sub floors to make sure they are complete.

Prior to scheduled installation date, complete all necessary sub floor preparations, including scraping, sanding, filling, and sweeping (this does not apply to grinding and epoxy-filling concrete).

Verify and accept measurements prior to material installation. Immediately bring any discrepancies in quantities of materials received from those required to the COR's attention.

Prior to installation, remove and properly store (not in tubs or showers) any toilets or pedestal sinks installed in the house. If rings come loose from toilets, they shall be replaced.

If resilient flooring is to be placed over a cracked slab, notify the COR.

Ceramic Tile, Clay Tile, and Stone**Pre-job conditions**

Prior to installation, inspect all material for discoloration. Any discoloration or mixing of run lots within a unit is unacceptable.

Provide all materials required for installation of the ceramic tile or stone, including crack isolating membrane, approved underlayment, thinset adhesive, and grout.

Provide transitions at applicable adjacent surfaces. All materials shall be in conformance with industry and Tile Council of America standards, and the manufacturer's recommendations for the installation of the ceramic tile or stone.

Grout colors shall be specified in the Plans, or selected by the COR. Fill all joints with grout of the selected color(s).

For stone installations, mix tiles from all boxes and pallets to ensure as even a mix of color and markings as possible.

Construction Methods and Standards

Joint lines shall be regular and equal in width, except when using irregular hand-made tiles and stones.

Standard: In general, grout joints shall be 3/16 in. wide for ceramic tile. Joints in polished stone shall be butted tight. Actual grout joints may vary with ceramic tile and stone styles selected.

Hairline cracks in grout are acceptable.

Standard: Cracks in grout shall not exceed 1/32 in.

Install underlayment before installing ceramic tile or stone flooring over wooden sub flooring. particleboard underlayment is not recommended. Use of cement backer board is preferred.

Protect all walls, ceilings, concrete floor areas, and concrete pavements from adhesive and grout spillage.

Keep cutting of tiles or stone to a minimum. If cuts are necessary, space them evenly to provide a uniform geometric layout, smooth the edges of all cuts,

Tiles shall not be cracked.

Standard: Tiles having cracks that are visible to the untrained eye at a distance of 4 ft. under normal light conditions are not acceptable.

Standard: Tiles must be tightly adhered to the backing. Loose tiles that can be moved by hand shall be replaced.

Standard: For granite, marble, and stone, any cracks that are in excess of 3/64 in. require replacement of the cracked piece.

Marble, granite, and stone floors shall be installed free from stains, scratches, or abrasions and shall have a consistent surface sheen or texture. Small pits are acceptable. Fill voids in excess of 3/8 in. diameter.

Lay tile and stone plumb, square, flat, and even.

Standards: Finish floors shall not deviate more than 1/4 in from level in an 8 ft. horizontal distance. No point in the floor shall be 3/16 in. above or below the plane of the floor. Some minor irregularities due to the varying thickness of quarry tile, stone, and terra cotta type tiles are acceptable.

Install flat and hand-made tiles so that they are relatively level to adjacent tiles.

Standard: For flat tile installations, adjoining tiles shall be no more than 1/16 in. higher or lower than the surrounding tiles. For tile that is hand-made, such as terra cotta, with uneven surfaces, the butts at the grout joints shall not exceed 1/4 in. from the surrounding surface.

Install transitions at applicable adjacent surfaces.

Fully support the outside corners of ceramic tile or stone fireplace hearths and set with thinset mastic.

Remove and replace baseboard molding at fireplace tiles to facilitate installation of ceramic tile or stone.

For floors in bathrooms, caulk the tub-and-shower-to-floor intersection with approved silicone caulk. Set toilets over finished floor, do not caulk to the stool.

Completely clean all finished work and other affected areas to remove any adhesive, grout, or dirt.

Securely cover all completed tile or stone floors with heavy gauge paper and tape after cleaning.

Protect all set tile and grout from foot traffic for 24 hours.

Completion (all flooring)

Upon completion of finish flooring work, reinstall all doors, hinge pins, and door-bumpers that were removed during installation. If doors need to be trimmed before they can be reinstalled to accommodate the thickness of the flooring, do not reinstall doors. Notify COR of the need to cut the doors.

Neatly place all surplus flooring, including, 4 tiles (depending, upon the area of the unit receiving tile) and 1/2 pound of grout in the entry closet, unless otherwise directed by the COR. Roll and secure all surplus resilient material and carpet before placing in the entry closet.

Mirrors

Pre-lob Conditions

Verify that mirrors are 1/4 in. thick, with polished edges on all 4 sides.

Verify the size and location of mirrors with the Plans.

Verify that the areas to receive mirrors are the same dimensions as shown on the Plans.

Construction Methods and Standards

When mirrors are viewed from the front, there shall be no visible imperfections, peeling, flaking, or discoloration within the metallic backing material.

Standard: Mirrors shall not have scratches or imperfections that are visible under normal lighting conditions from a 3 ft. distance.

Install mirrors relatively level.

Standard: Mirrors shall be level and plumb by 1/8 in. per 6 ft.

Mirrored wardrobe doors (doors to walk-in closets) shall meet the following standards: ANSI Z97 and UBC 5406. These mirrors shall have safety backings with labels indicating compliance with the above-mentioned standards.

mirrors shall be fastened securely into solid backing

Mirrors can be installed using 2 methods: J-Channel and mastic; and clips and screws. Both methods are described below. Confirm with the COR the preferred method of installation.

J-Channel and Mastic

J-Channel shall be cut to the same size as the mirror. Fasten the J-Channel securely to framing. Apply approximately a 2 in. dab of mirror-mastic to the painted, primed, or treated wall. Do not apply mastic to wall coverings or damp walls.

Cut two 1/8 in. neoprene setting blocks and place in J-Channel 1/4 in. from each end.

Apply the mirror to the wall, pressing firmly so that mastic is pressed flat against the wall.

The mirror shall slide down the channel and onto the setting blocks.

After installation, check mirror for proper bond. Clean the mirror of any debris and fingerprints.

Clips and Screws

This installation method applies to mirrors up to 36 in. high.

Secure two drywall fasteners 4 to 6 in. above the vanity. Fasten metal or plastic clips to the drywall fasteners. Check that clips are not over tightened.

Set the mirror into the clips.

Fasten the two clips to the top of the mirror (use screws).

Apply mastic while the mirror is resting on the vanity. Apply approximately a 2 in. dab of mirror-mastic to the painted, primed, or treated wall. Do not apply mastic to wall coverings or damp walls.

Apply the mirror to the wall, pressing firmly so that mastic is pressed flat against the wall.

The mirror shall slide onto the top of the backsplash.

After installation, check the mirror for proper bond. Clean the mirror of any debris and fingerprints.

SHOWER DOORS

Introduction

Shower doors shall be installed watertight and operate as intended. Shower door installations may include the door assembly or the entire enclosure. Refer to the Plans and the COR. Perform all installations in accordance with the manufacturer's instructions.

Pre-Job Conditions

All tile, marble, or grouting work shall be complete prior to shower door installation.

Verify that water resistant backing has been installed around tub and shower surrounds.

Construction Methods and Standards

The glass or plastic panels of shower and tub enclosures shall be free from scratches and defects. Notify the COR of any damage prior to installation.

Thresholds and knee walls must be clean and level.

Measure the wall-to-wall opening at the threshold. Cut the bottom track 3/16 in. less than this measurement.

Apply a bead of clear silicone under the bottom of the track, at joints between the wall tile, and at the shower base beneath the door track.

Use a level to vertically align wall jambs. Screw jambs to walls securely after applying a bead of silicone behind each jamb.

Apply a bead of clear silicone to the outside of each jamb.

Screw or clip the top rail of the tub or shower enclosure to the frame, or mechanically connect in a manner approved by the local Building Official.

Glass used in shower and tub enclosures must be tempered. The local building official must approve plastic panels. If plastic panels are used, provide the COR with the approval form from the local Building Official.

Sliding enclosures must be installed correctly so that the inside panel is the one closest to the showerhead. The outside panel shall be opposite the showerhead. Install all water shield parts (drip rail, rubber sweep, etc.) per the manufacturer's instructions.

For swing enclosures, install door for easy access into the shower stall. There must be a firm catch at the magnetic strike / latch. Adjust door as necessary.

Standard: Enclosures shall be assembled and caulked so that they do not leak at the frame.

For shower doors with 90 degree return panels:

Place the return panel as close to the edge of the knee wall as possible.

Run a drip cap of clear silicone on all outside walls of the return panel.

Clean all panels and frames, and remove scrap from the job.

Tub and Shower Surrounds

Pre-job Conditions

Standard: Tub and shower surrounds shall be assembled so that they are watertight.

Verify that appropriate water-resistant backing has been applied. If no such material has been installed, install prior to beginning work.

Use materials such as cement board or lath and plaster for such backing.

Construction Methods and Standards

Fill the gap between the shower pan/tub top and the bottom of the first row of tile with a silicone based caulk.

Tile

Install lath and mortar before laying tile. D Grout shall not be cracked at the bottom of the first course of tile, hairline cracks excepted.

Cultured Marble

Typically, these are three panels glued to waterproof drywall and caulked between the seams.

Fiberglass

Typically this is a one-piece enclosure that shall be installed pursuant to the manufacturer's instructions during the framing process.

Finish Site Work

FINISH GRADING

Introduction

Supply labor, equipment, tools, and materials necessary to perform grading. Grading is performed throughout the construction process, to ensure proper placement of various components, and to ensure suitable site drainage. Correct grading is essential, as it establishes drainage away from the house. Final grading may also include cleaning of sidewalks, curbs, gutters, and streets as necessary to obtain final street release.

Pre-job Conditions

Walk the site with the COR prior to starting.

Verify if the work includes the installation of sub-drains and placement and compaction of backfill behind foundations and retaining walls pursuant to the Plans and Project Geotechnical Report.

Verify with the Builder the procedure for removal of rocks that are too large to be removed with a grading tractor.

Verify if city sidewalks are to be graded. If required, grade per city specifications.

Take caution not to damage various utilities and improvements installed. This includes, but is not limited to, curbs and gutters, vaults, water services, and pedestals. Property lines and utilities are staked prior to grading. Make sure that equipment does not knock down stakes and property line markers.

Final grading shall occur after all the trenches have been backfilled and settled.

Ensure proper dust control through any means necessary and appropriate including, but not limited to, using a water truck and laborer.

Standard: All common walks, entry walks, and drives are to be graded and compacted to within ± 0.1 ft. with no major voids.

Construction Methods and Standards

General practices:

Do not run graders, bulldozers or other equipment parallel, or within 6 ft. of basement walls or foundations. Instead, pull up to the building, drop the blade, and pull dirt away.

Grading is best performed when dirt is dry. Take weather conditions into account.

Finish grading work usually includes four trips: 1) rough pull, 2) finish prior to flatwork, 3) finish after flatwork, and 4) touch-up.

Rough Pull

Rough pull shall be performed after the foundation is installed but prior to the lumber drop. The acceptable grade is ± 0.1 ft.

Rough pull front, side, and rear yards in accordance with the Civil Engineer Plan or Landscape Architect Plan and as required for proper drainage. Fill all voids tight to the foundation edge.

Shape berms, swales, and slopes as required.

Sweep all slabs so that they are free of dirt.

Finish Prior to Flatwork

Standard: Grade house walls, drives, porches, and city sidewalks to +/-0.1 ft. of final grade per the Plans.

If there are block wall fences, grade rear and side yards as necessary.

If there are onsite retaining walls, backfill per the Project Geotechnical Report.

Finish after Flatwork

Satisfy all requirements necessary to achieve the final lot certification from the Project Civil Engineer and all governing agencies, including positive drainage with no ponding.

Grade all berms and swales. Wheel roll if required.

Grade around masonry walls and wood fences.

Slopes five (5) ft. or less in height shall be graded in conjunction with the lot then hand raked.

Remove from the site any excess soil or rock generated by finish grading operations and masonry wall installations.

Touch-Up

Hand-rake the entire lot.

Sweep all concrete, clean-up curbs and gutters, and wash streets as necessary.

Perform all finish grading operations, including hand grading in areas not accessible by machines.

Rocks larger than 1 in. (after raking has been done) shall be removed.

At no time shall any dirt or rock be placed in streets or on city sidewalks. Immediately clean the streets and city sidewalks of any dirt or rock spilled or placed there.

Protect all asphalt and concrete surfaces from chemical spillage, including but not limited to the spillage of oil, gasoline, diesel fuel, and hydraulic fluids, immediately and completely clean up any such spillage.

Drainage

Meet the following standards for drainage:

Do not raise or lower the finish grade of drainage swales. Swales shall drain within 48 hours after cessation of rain under normal storm conditions.

Maintain a 6 in. clearance between wood and soil.

Verify and maintain a slope away from foundations of 1/4 in. fall per 1 ft. horizontally, for a distance of at least 5 ft.

Soils within 5 ft. of the foundation perimeter shall be compacted so that water dissipates within 24 hours after normal rainfall. Within the 5-foot perimeter, soils shall not settle more than 3 in. in depth in anyone area larger than 3 ft. in diameter.

utility trenches in landscaped areas shall not settle more than 6 in. or cause water to pond within 5 ft. of the foundation perimeter.

Trenches that are overlaid with concrete or asphalt shall not pond water for more than 48 hours after rainfall.

Paved trenches shall not subside more than one (1) in. from the surrounding pavement.

4. CRITERIA:

The contractor shall perform the job in accordance with U.S. Codes and standards and local host country codes.

International Building Codes 2006

International Plumbing Codes 2006

ASTM Standards

5. MEASUREMENT:

Offerors will take measurement during site visit.

6. SCHEDULE TO BE APPROVED BY COR PRIOR TO DEPLOYMENT.

The project start date is to be made as soon as possible but is expected to be after August 1, 2011.

The Contractor shall commence work under this contract promptly, execute the work diligently, and achieve final completion and acceptance including final cleanup of the premises within the contract period specified.

The period of performance for project completion shall be 90 working days from NTP.

ATTACHMENT # 4
CUT SHEETS

Will be provided on site visit.

J. QUOTATION INFORMATION

A. QUALIFICATIONS OF OFFERORS

Offerors/quoters must be technically qualified and financially responsible to perform the work described in this solicitation. At a minimum, each Offeror/Quoter must meet the following requirements:

- (1) Be able to understand written and spoken English;
- (2) Have an established business with a permanent address and telephone listing;
- (3) Be able to demonstrate prior construction experience with suitable references;
- (4) Have the necessary personnel, equipment and financial resources available to perform the work;
- (5) Have all licenses and permits required by local law;
- (6) Meet all local insurance requirements;
- (7) Have the ability to obtain or to post adequate performance security, such as bonds, irrevocable letters of credit or guarantees issued by a reputable financial institution;
- (8) Have no adverse criminal record; and
- (9) Have no political or business affiliation which could be considered contrary to the interests of the United States;

B. SUBMISSION OF QUOTATIONS

This solicitation is for the performance of the construction services described in SCOPE OF WORK, and the Attachments which are a part of this request for quotation.

Each quotation must consist of the following:

S/NO	Description	Copies Required
Volume I	Executed Standard Form SF-1442, and complete Attachment 2, "BREAKDOWN OF PROPOSAL PRICE BY DIVISION OF SPECIFICATION"	- 1 Original - 2 Copy
Volume II	Performance schedule in the form of a "bar chart" and Business Management/Technical Proposal.	- 1 Original - 2 Copy

Submit the complete quotation to the address indicated on Standard Form 1442.

The Offeror/Quoter shall identify and explain/justify any deviations, exceptions, or conditional assumptions taken with respect to any of the instructions or requirements of this request for quotation in the appropriate volume of the offer.

Volume II: Performance schedule and Business Management/Technical Proposal.

(a) Present the performance schedule in the form of a "bar chart" indicating when the various portions of the work will be commenced and completed within the required schedule.

This bar chart shall be in sufficient detail to clearly show each segregable portion of work and its planned commencement and completion date.

(b) The Business Management/Technical Proposal shall be in two parts, including the following information:

Proposed Work Information - Provide the following:

- (1) A list of the names, addresses and telephone numbers of the owners, partners, and principal officers of the Offeror;
- (2) The name and address of the Offeror's field superintendent for this project;
- (3) A list of the names, addresses, and telephone numbers of subcontractors and principal materials suppliers to be used on the project, indicating what portions of the work will be performed by them; and,

Experience and Past Performance - List all contracts and subcontracts your company has held over the past three years for the same or similar work. Provide the following information for each contract and subcontract:

- (1) Customer's name, address, and telephone numbers of customer's lead contract and technical personnel;
- (2) Contract number and type;
- (3) Date of the contract award place(s) of performance, and completion dates; Contract dollar value;
- (4) Brief description of the work, including responsibilities; and
- (5) Any litigation currently in process or occurring within last 5 years.

C. 52.236-27 SITE VISIT (FEB 1995)

- (a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

- (b) A site visit has been scheduled for July 11, 2011 at 02:00 p.m.
- (c) Participants will meet at House # 45, C-1, Gulberg III, Lahore.
- (d) Maximum two persons from one firm can participate in site visit. Interested offerors must provide with full name of participant/s (as written on NIC), NIC number and particulars of vehicle to be used like make, model, color and registration number before 2.00 p.m. on July 07, 2011. This information can be provided on following e-mail addresses:

Khurshida2@state.gov

Zainuddina@state.gov

1.0 LATE QUOTATIONS. Late quotations shall be handled in accordance with FAR

F. 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE
(FEB 1998)

This contract incorporates the following provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at:

<http://acquisition.gov/far/index.html/> or, <http://farsite.hill.af.mil/search.htm>

These addresses are subject to change. If the Federal Acquisition Regulation (FAR) is not available at the locations indicated above, use of an Internet "search engine" (such as, Yahoo, Infoseek, Alta Vista, etc.) is suggested to obtain the latest location of the most current FAR.
<http://www.statebuy.state.gov>

FEDERAL ACQUISITION REGULATION (48 CFR CH. 1)

52.215-1 INSTRUCTIONS TO OFFERORS--COMPETITIVE ACQUISITION (JAN 2004),
which is incorporated by reference into this solicitation.

K. EVALUATION CRITERIA

Award will be made to the lowest priced, acceptable, responsible quoter. The Government reserves the right to reject quotations that are unreasonably low or high in price.

The Government will determine acceptability by assessing the offeror's compliance with the terms of the RFQ. The Government will determine responsibility by analyzing whether the apparent successful quoter complies with the requirements of FAR 9.1, including:

- ability to comply with the required performance period, taking into consideration all existing commercial and governmental business commitments;
- satisfactory record of integrity and business ethics;
- necessary organization, experience, and skills or the ability to obtain them;
- necessary equipment and facilities or the ability to obtain them; and
- otherwise qualified and eligible to receive an award under applicable laws and regulations.

SECTION L - REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS OR QUOTERS

L.1 52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)

(a) Definitions.

"Common parent", as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

"Taxpayer Identification Number (TIN)", as used in this provision, means the number required by the IRS to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All offerors must submit the information required in paragraphs (d) through (f) of this provision in order to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325 (d), reporting requirements of 26 USC 6041, 6041A, and 6050M and implementing regulations issued by the Internal Revenue Service (IRS). If the resulting contract is subject to the reporting requirements described in FAR 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 USC 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer Identification Number (TIN).

TIN: _____

☐ TIN has been applied for.

☐ TIN is not required because:

☐ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the U.S. and does not have an office or place of business or a fiscal paying agent in the U.S.;

☐ Offeror is an agency or instrumentality of a foreign government;

☐ Offeror is an agency or instrumentality of the Federal Government.

(e) Type of Organization.

☐ Sole Proprietorship;

☐ Partnership;

☐ Corporate Entity (not tax exempt);

- ☐ Corporate Entity (tax exempt);
- ☐ Government entity (Federal, State, or local);
- ☐ Foreign government;
- ☐ International organization per 26 CFR 1.6049-4;
- ☐ Other _____

(f) Common Parent.

- ☐ Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this clause.
- ☐ Name and TIN of common parent;

Name _____
TIN _____

(End of provision)

L.2 Reserved

L.3 52.204-8 Annual Representations and Certifications. (OCT 2010)

(a) (1) The North American Industry Classification System (NAICS) code for this acquisition is 236220.

(2) The small business size standard is USD 33.5 million.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b) (1) If the clause at 52.204-7, Central Contractor Registration, is included in this solicitation, paragraph (d) of this provision applies.

(2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. **The offeror shall indicate which option applies by checking one of the following boxes:**

☐ (i) Paragraph (d) applies.

☐ (ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c) (1) The following representations or certifications in ORCA are applicable to this solicitation as indicated:

(i) 52.203-2, Certificate of Independent Price Determination Reserved

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed \$150,000.

(iii) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the clause at 52.204-7, Central Contractor Registration

- (iv) 52.204-5, Women-Owned Business (Other Than Small Business). Reserved
- (v) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.
- (vi) 52.214-14, Place of Performance—Sealed Bidding Reserved.
- (vii) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.
- (viii) – (xii). Reserved
- (xiii) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA–designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.
- (xiv) 52.223-4, Recovered Material Certification This provision applies to solicitations that are for, or specify the use of, EPA–designated items.
- (xv) 52.225-2, Buy American Act Certificate. This provision applies to solicitations containing the clause at 52.225-1.
- (xvi) 52.225-4, Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate. (Basic, Alternate I, and Alternate II) This provision applies to solicitations containing the clause at 52.225-3.
 - (A) If the acquisition value is less than \$25,000, the basic provision applies.
 - (B) If the acquisition value is \$25,000 or more but is less than \$50,000, the provision with its Alternate I applies.
 - (C) If the acquisition value is \$50,000 or more but is less than \$67,826, the provision with its Alternate II applies.
- (xvii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.
- (xviii) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan—Certification.
- (xix) Reserved

(d) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at <http://orca.bpn.gov>. After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [***Offeror to insert changes, identifying change by clause number, title, date***]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer. Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

(End of Clause)

L.4. 52.225-18 PLACE OF MANUFACTURE (SEPT 2006)

(a) *Definitions.* As used in this clause—

“Manufactured end product” means any end product in Federal Supply Classes (FSC) 1000-9999, except—

- (1) FSC 5510, Lumber and Related Basic Wood Materials;
- (2) Federal Supply Group (FSG) 87, Agricultural Supplies;
- (3) FSG 88, Live Animals;
- (4) FSG 89, Food and Related Consumables;
- (5) FSC 9410, Crude Grades of Plant Materials;
- (6) FSC 9430, Miscellaneous Crude Animal Products, Inedible;
- (7) FSC 9440, Miscellaneous Crude Agricultural and Forestry Products;
- (8) FSC 9610, Ores;
- (9) FSC 9620, Minerals, Natural and Synthetic; and
- (10) FSC 9630, Additive Metal Materials.

“Place of manufacture” means the place where an end product is assembled out of components, or otherwise made or processed from raw materials into the finished product that is to be provided to the Government. If a product is disassembled and reassembled, the place of reassembly is not the place of manufacture.

(b) For statistical purposes only, the offeror shall indicate whether the place of manufacture of the end products it expects to provide in response to this solicitation is predominantly—

- (1) ☐ In the United States (Check this box if the total anticipated price of offered end products manufactured in the United States exceeds the total anticipated price of offered end products manufactured outside the United States); or
- (2) ☐ Outside the United States.

L.5 AUTHORIZED CONTRACT ADMINISTRATOR

If the offeror does not fill-in the blanks below, the official who signed the offer will be deemed to be the offeror's representative for Contract Administration, which includes all matters pertaining to payments.

Name: _____

Address: _____

Telephone Number: _____

L.6 652.228-70 DEFENSE BASE ACT – COVERED CONTRACTOR EMPLOYEES (JUN 2006)

(a) Bidders/offerors shall indicate below whether or not any of the following categories of employees will be employed on the resultant contract, and, if so, the number of such employees:

Category	Yes/No	Number
(1) <i>United States citizens or residents</i>		
(2) <i>Individuals hired in the United States, regardless of citizenship</i>		
(3) <i>Local nationals or third country nationals where contract performance takes place in a country where there are no local workers' compensation laws</i>		<i>Local nationals:</i> _____ <i>Third Country Nationals:</i> _____
(4) <i>Local nationals or third country nationals where contract performance takes place in a country where there are local workers' compensation laws</i>		<i>Local nationals:</i> _____ <i>Third Country Nationals:</i> _____

(b) The contracting officer has determined that for performance in the country of Pakistan –

☒ Workers' compensation laws exist that will cover local nationals and third country nationals.

☐ Workers' compensation laws do not exist that will cover local nationals and third country nationals.

(c) If the bidder/offeror has indicated "yes" in block (a)(4) of this provision, the bidder/offeror shall not purchase Defense Base Act insurance for those employees. However, the bidder/offeror shall assume liability toward the employees and their beneficiaries for war-hazard injury, death, capture, or detention, in accordance with the clause at FAR 52.228-4.

(d) If the bidder/offeror has indicated "yes" in blocks (a)(1), (2), or (3) of this provision, the bidder/offeror shall compute Defense Base Act insurance costs covering those employees pursuant to the terms of the contract between the Department of State and the Department's Defense Base Act insurance carrier at the rates specified in DOSAR 652.228-74, Defense Base Act Insurance Rates – Limitation. If DOSAR provision 652.228-74 is not included in this solicitation, the bidder/offeror shall notify the contracting officer before the closing date so that the solicitation can be amended accordingly.